

Information is in a way the opposite of garbage, although in our contemporary commercialized world they may at times appear identical. As a rule, information is something to preserve, garbage is something to be destroyed. However, both can be looked on as a kind of waste product, a physical burden, and for contemporary society both are among the most pressing problems today.

— Bill Viola

Fall
1996

THE INFO
PERPLEX

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Emigre no.40

Quotes on inside front and back covers by Bill Viola.
From HISTORY, 10 YEARS, AND THE DAYDREAM,
in *Reasons for knocking at an Empty House*. Cambridge, MA
and London: MIT Press, 1996.

This issue of *Emigre*
was typeset in Base-9
and Base-12, designed
by Zuzana Licko.

Postmaster:
Emigre (ISSN 1048-3717)
is published quarterly for \$28
per year by Emigre, Inc.,
4475 D Street, Sacramento,
CA 95819, U.S.A.
Second class postage paid
at Sacramento, CA.

Postmaster please send
address changes to: *Emigre*,
4475 D Street, Sacramento,
CA 95819, U.S.A.

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Arrivals and Departures

"The more things change, the more they stay the same." But what does this popular saying mean, riddled as it is with contradictions? On one level it means there cannot be anything new that isn't in some way premised on something old. The "newness" of "new media" is certainly one example of how something is sold to us as having arrived out of nowhere. Of course, the various components of digital multimedia preexist this medium but are structured, distributed and consumed in new ways. The old baggage that these components bring with them is just as significant as the shiny new packages they are wrapped in. By saying this I do not mean to rephrase Marshall McLuhan's famous dictum that the shape of the new medium takes the form of the old. Rather, it is how previous media have helped shape our consciousness

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(and continue to) through the gradual accumulation of experiences, each day in our everyday lives. The worlds of music videos, films, commercials, songs, books, magazines, television, newspapers, and so on inhabit our minds, conditioning us to expect particular things in particular ways. These media combine texts, images, and sound in various ways, yet each have a distinctive form and certain expectations about how one will receive types of information.

When Rudy approached me about putting together an issue of *Emigre*, it was difficult not to deal with the issue of "new" media. However, I did not want to talk about new media in the same old ways. I was much more interested in discussing what was truly new as well as what was old, without one being any better than the other. It became clear to me that the theme should really be about experiencing and encountering information in a variety of ways. If there is any continuity left between the graphic design of yesteryear and the graphic design of today and, possibly tomorrow, it would be in the

act of shaping information, orchestrating interaction, and guiding experiences for audiences. Ultimately, it became a search for connections and relationships amongst ideas and experiences. Happily, this is also my definition of design.

It is this mix of old media components in new media disguises that forms one basis of my essay in this issue, *UNFOLDING INFORMATION*. In that essay I stress the hybridity of information forms in today's society, particularly through the development of things like "info-mercials," "edu-tainment," "docu-dramas," and "ficto-criticism," for example. Their newness lies in the grafting together of older, disparate, even oppositional, forms. While some may see these new relationships only as parasitic – the lowly, self-serving body feeding off a lofty and healthy one – I see their relationship as

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virtual reality. Rather than displacing or even dispensing with the body, Diane's discussion and work in VR returns kinesthetics to its central role in understanding and experiencing information. By doing so, particularly within the contexts of digital media, the body is not returned to some pre-technological sense of direct, unmediated contact with the world (or its simulation). Rather, it gives us a more complex understanding of the role the body plays in both the construction of virtual worlds and its mediation of reality.

It would not be possible to put together an issue on shaping information without including the writings of Frances Butler, who as a designer, historian, and theorist, was among the first people in the field to even speak of the subject. *PUNCTUATION, OR THE DREAM OF LEGIBILITY: FROM VISION TO SUBSTANCE*, gives us a brief, historical

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symbiotic, or mutually dependent. Their conjuncture has the potential to revitalize both bodies as it throws our expectations and conventions into a state of doubt, allowing us to rethink some of our widely held assumptions. However, I do not wish to be an apologist for the mind-numbing fare too often churned out by these joint ventures. Nor do I wish to uncritically celebrate their union as some sort of natural consequence of contemporary life. Rather, it is the possibilities that are opened up for investigation by such couplings, collisions, and mergers that are the most exciting and interesting.

The old into the new finds life, even new life forms, in Diane Gromala's contribution to this issue, *RECOMBINANT BODIES*. As the title of her essay makes clear, Diane looks at the emerging field of virtual reality and its impact on minds and bodies. Someone, whose name I don't recall now, once remarked, "bodies are good to think with," and it is in this sense that Diane's work with digitally-mediated environments brings the body back to the center of discussions about

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overview of how shape has been linked to meaning. Although written before the widespread introduction of the personal computer, Frances's essay provides a prescient glimpse of how the devices used in print culture might be considered in the context of digital multimedia. Frances's essay plays a crucial role in this issue by laying the foundation for a discussion of the spatial issues of configuring information. Frances has, in other essays, remarked about the "recombinant" nature of today's design strategies that frequently reuse earlier, archaic devices. It is this process of reuse, or as she puts it "marginal inversion," that offers us a creative theory for practice.

It is the role of connections in the world of hypertext which Anne Burdick writes of in her review of Jay David Bolter's book, *Writing Space*. The destruction of linear narratives that is threatened by the advent of hypertext, with its multiple branching structures and numerous pathways, gives us a template with which to gauge how we travel through information. If the old notion of linear narrative gave us the idea of

arriving at meaning, whether by sentence (word upon word), paragraph (sentence upon sentence), or by text (paragraph upon paragraph), hypertext promises us meaning at the point of departure. The accretion of information and the creation of meaning can be just as much in the connections between, for example, point C and point G as it is in point A to point Z.

It is in the realm of the wor(l)d, in the spaces between things, that we meet John Warwicker of Tomato engaged in a concurrent dialogue with Teal Triggs. Their piece **INTHISWORLDTOGETHER** provides a personal point of departure for considering the interconnectedness of all things in the world. Through the conjunctions of "and" and "is," they unite and conflate a litany of creative practices. In doing so, they relate design to a world connected to other practices that

CENTER
INSERT

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threaten the autonomy and isolation of design. Jean-François Lyotard once remarked on the concept of "and" by describing how it served to unite things, not through a categorical order or preordained syntax but through abrupt juxtaposition or "parataxis," the stringing along together of ideas without apparent connection. Parataxis is a practice, as Frances Butler reminds us, that brings together the widely separated into the same space and time. John and Teal provide us with a mental map for finding our way in the world and remind us that every arrival is simply another departure.

Andrew Blauvelt



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Unfolding Information

By Andrew Blauvelt



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I attended the last AIGA National Conference and was quite surprised to feel something other than anxiety about technology pervade the crowd. All those years of reading and listening to designers condemn the computer, followed by their anxiety about learning to use it, had finally given way to something bordering on anticipation about the opportunities (a.k.a. profits) of digital media. Of course, there were skeptical neo-Luddites in attendance, as well as a few critically conscious and socially motivated naysayers, but the opportunities unleashed by this new technological genie far outweighed their pessimism. Now that the protocol-driven web site has displaced the template-driven newsletter as the *de rigueur* choice of corporate communications these days, designers (and others) have a much more sunny outlook on the technological maelstrom.

Even Massimo Vignelli – guardian of design orthodoxy – recently and publicly declared that he is no longer a graphic designer, but rather an “*information architect*,” and in the process was feeling “*much more relaxed*” than he had ever been. For Vignelli, the information architect “...means to organize information in a way that is essentially retrievable, understandable, visually captivating, emotionally involving, and easily identifiable.” This change of professional identities for Vignelli is certainly more important than any change in his practice. On the side of information, he has claimed quite a roster of traditions – “*history, typography, semiotics*” – while leaving graphic designers in the unmentioned but residual role of persuasive stylists, who are “*rooted in advertising, pictorial arts and trends.*” Vignelli, following Richard Saul

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There is no sphere of pure information or an untainted practice that is somehow beyond, or above, the messy realities and compromised complexities of life.



Accompanying this forecast is the increasing extension – some say disintegration – of the profession of graphic design from print to electronic media, and with it a proliferation of folks who practice design even if they don't call it that.

Wurman, invokes the title of architect to further enhance the social standing afforded by such a claim: the undisputed status of a licensed profession with aspirations of planning, order, and control. In light of the social realities of most architectural practice today, Vignelli might have claimed the more appropriate title of “*information developer.*” After all, there is no sphere of pure information or an untainted practice that is somehow beyond, or above, the messy realities and compromised complexities of contemporary life – whether graphic design or architecture.

While I find that the dichotomy Vignelli presents is problematic, a concern that I will address later, what seems worthy of consideration is the ease with which these "camps" are articulated. The field of information design does seem to exist as an entity within graphic design practice with its own leading practitioners, publications, conferences, courses, and journals. This kind of autonomy is bolstered by the rhetoric of an "Information Age," and the ever-expanding communications networks (e.g., the "information superhighway") that support the transfer of data among far-flung places and people. When cast in a particular light, the rationalist aspirations of information design stand in sharp contrast to most celebrated forms of contemporary graphic design, particularly the kind of design produced in the 1980s and 1990s, defined as it is by individual

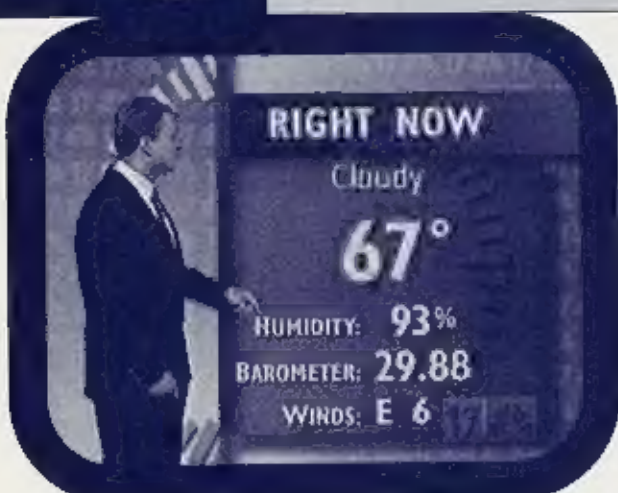
For proponents of information architecture there is a clear emphasis on organizing information for perceptual retrieval. Following the tenets of information theory, the focus is on the reduction of "noise" in the communication "channel" by eliminating extraneous content, simplifying formal options, and narrowing possible interpretations. The general economy of this kind of thinking leads from the many to the few. Information architecture allies itself with a certain pragmatism and utility, striving to be "useful." Contrast this with a practice of graphic design that adopts a general economy of excess, leading from the few to the many: one solution produces a multitude of interpretations. Following the tenets of literary theory, the tendency is additive, not reductive; whether enlarging the message by adding something personal,

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Information is not so much a commodity that can be consumed as much as a resource that can produce new information.



styles. This is the kind of juxtaposition that leads Vignelli to his conclusion. I would like to examine the two camps that Vignelli proposes, information architects and graphic designers, in order to illuminate an underlying philosophy I believe is at work for each type of practice.

to the arguments made for multiple readerly interpretations, or the visual vocabulary of collage, montage, and other layering techniques. Following the language games employed by post-structuralists (e.g., puns, linguistic inversions, double entendres, etc.), this form of graphic design embraces the concept of "play" as its philosophical economy. It seeks the unending plenitude found within the concept of "repetition-without-exhaustion," which is the basis of all game playing, even games of the most serious kind. In this way, information is not so much a commodity that can be consumed as much as a resource that can produce new information. All institutions and practices have a survival mechanism for self-perpetuation. Information architecture

achieves this by the propensity of the world toward constant disorder (that it must reorder), while graphic design relies on the constant lack of interpretive closure (a fixed, stable meaning) in communication. Both circumstances ensure that new design problems are produced that require new solutions.

Both types of practice place great rhetorical importance on how design is received by audiences: information design speaks of users, while graphic design speaks of readers. Whether cast as users or readers, both terms belie a need to construct models for audiences that reinforce their respective professional ideologies. Both are types of design practice and, therefore, place great emphasis on the process of encoding messages (i.e., determining message content, giving visual form, selecting modes of distribution, etc.). However, it is in the act of decoding (i.e., how audiences interpret, respond and otherwise receive information) that we discover two different models for audience action. It might be stated rather crudely, but accurately, that information architecture employs a "deterministic" model for audience action,

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Blauvelt

Both camps share an equally mechanistic view of the communications process as a closed circuit of senders, messages, and receivers.

WE INTERRUPT
OUR REGULAR PROGRAM

INFO-SOURCE
FROM THE CITY OF RALEIGH

Next:

- 524 Rt. 10 Longview
- 525 Rt. 10 Longview Saturday
- 528 Rt. 8 Northcliff
- 530 Rt. 16 Oberlin Mon. - Fri.
- 531 Rt. 16 Oberlin Saturday
- 532 Rt. 4 Rex Hospital
- 533 Rt. 4 Rex Hospital Saturday
- 534 Rt. 7 South Saunders
- 535 Rt. 7 South Saunders Saturday
- 536 Rt. 22 State Street (MORE...)

FRAN RECOVERY ASSISTANCE FOR
YOUR 3 DIGIT #, HANG UP AND WATCH

INFO-SOURCE
FROM THE CITY OF RALEIGH

Next:

- 537 Rt. 22 State Street Saturday
- 538 Rt. 15 Wake Medical
- 539 Rt. 15 Wake Medical Sat
- 541 CAT CONNECTORS
- 542 Rt. 11 Aventura Ferry
- 544 Rt. 11 Buck Jones
- 545 Buck Jones Saturday
- 546 Rt. 20 Falls of Neuse
- 547 Rt. 20 Falls of Neuse Saturday
- 548 Rt. 20 Lassiter Mill (MORE...)

FOR BUREAU OF RECORDS & INTER
YOUR 3 DIGIT #, HANG UP AND WATCH

one that limits options and determines user response. On the other hand, graphic design adopts a "liberal-pluralist" conception of an audience by claiming varied interpretations on the part of readers/viewers. Such a conception is considered pluralist because it supports diverse possibilities, sometimes infinite, for interpretation and is liberal in the sense that readers are accorded the freedom to choose their interpretive positions. Both models share the same overly determined approach to designerly encoding, albeit for different ends: one tries to limit response, the other tries to expand it. Despite differently perceived outcomes, both approaches are a function of the same control by designers to produce desired effects. Both camps share an equally mechanistic view of

F.Y.I.

the communications process as a closed circuit of senders, messages, and receivers. Despite the fact that this transmission model has been displaced in communications theory for decades, it is still embraced by design (both graphic and information) because it unquestionably reproduces the unequal power positions of senders and receivers. Namely, it conserves power on behalf of senders, even when those senders seek to "give" power to otherwise "passive" receivers. What such a linear system neglects is the complex social contexts in which communication routinely occurs, including how meaning is actively constructed, mediated, produced, and circulated — even how common meanings are not routinely arrived at; in short, the failure of communication.

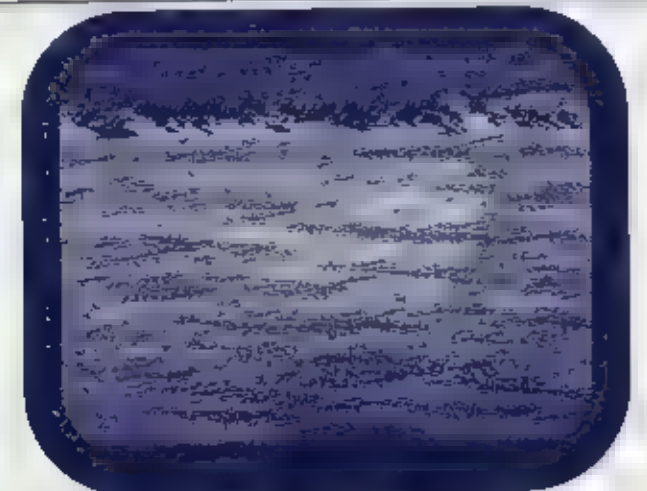
Like Vignelli, I have been thinking of the schism in graphic design between so-called information design and the rest. But unlike Vignelli, I am interested in questioning, not reinforcing, such boundaries. Because as I see it, the distance between such categories has already disappeared.

Unfolding Information



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Unlike Vignelli, I am interested in questioning, not reinforcing, such boundaries. Because as I see it, the distance between such categories has already disappeared.



Hybridity and the Information Product

During the recent political conventions, both Republican and Democratic, the media concluded that such gatherings had become "scripted," "programmed," "info-mercials," and consequently not newsworthy. How these conventions differ from other types of staged news events that are broadcast quite happily everyday by the same networks, including political photo-ops and sporting events, even coverage of "spontaneous" events like terrorism, is confusing. The problem seems to be the role assumed by convention organizers, who felt compelled to program their events to fit the allotted time-slot, thereby appropriating the function of news producers, reporters, anchors, and editors, who normally orchestrate such events. It seems both conventions had crossed the thin line between loosely contained events to be narrated and prepackaged

The separation between information and persuasion exists only in an analytical abstraction. When given form, or otherwise represented, information enters the realm of rhetorical persuasion. And information demands representation in order to be useful. Information, like every other commodity, is exchangeable, but not exhaustible. Therefore, information is regulated in the marketplace on the basis of abundance and gains value by controlling its access and intelligibility. This problem of information abundance can be seen in the shift by analysts who used to define their jobs on the basis of providing more information

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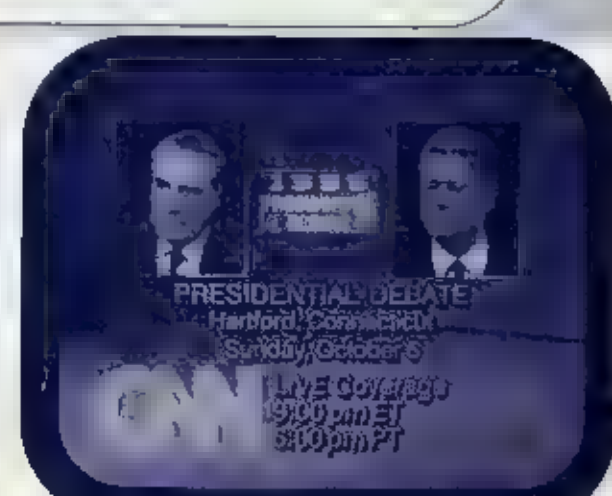
— Bill Viola

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performances to be seen. They had moved from the information space of a televised event to the information space of a television program. Even the most spontaneous event of either convention – the resignation of a Clinton political advisor in the face of a sex scandal – was viewed suspiciously by some news media because of the timing of the story (the day before Clinton's acceptance speech) and the source of its announcement (the *Star* tabloid).

to enhance decision-making, and who now defend their jobs by managing too much information. When gauging the claims of a so-called Information Age, it is helpful to remember that every society has been an information society. It is the amount, intensity, and circulation of information that makes this age different from others. While the role of the contemporary information professional will be to regulate access and interpret information (the historic function of such people, whether priests or teachers), designers – as purveyors of symbolic languages – are among the most likely people to give form to, and thereby enhance, information products.

Hybridity and the Information Product

Needless to say, the kind of information found in the public sector of yesteryear is not likely to be the kind of information product in the private sector of today. Information used to be seen as fulfilling particular needs but information now exists to stimulate demand. This is how information is made productive (i.e., "useful") in today's economic marketplace. I'm concerned that Massimo's happiness may be short-lived as the realization dawns that his carefully constructed divisions between useful information graphics and useless cultural garbage infiltrate each other. Of course, this is already happening. The Ross Perot of 1992 – charts, graphs, and pointer in hand – may have been the poster boy of this phenomenon, but the advent of things like info-mercials, docu-dramas, and edu-tainment had already captured the public imagination. The success of these hybrid

We can understand how information technologies are themselves hybridized forms by looking to Wim Wenders's film *Until the End of the World*. Wenders unites the cartoonish look and humor of a video game interface with a powerful imaging and data base search program to identify the film's main character, Trevor McPhee. A similar interface is also used to track the film's characters as they traverse the globe by following the information trail of their financial transactions. Wenders uncovers and juxtaposes the ironic parallels between information and imaging technologies developed for military uses that mimic the graphic language and terminology of video games (and vice versa). What makes this collision of forms so appealing, and frankly more believable than the more futuristic visions of other sci-fi movies, is the way in

Unfolding Information

Information design can be both enlightening and entertaining, illuminating and delightful, practical yet fanciful.



WE'LL BE
RIGHT BACK



products testifies to their ability to generate some sort of pleasure in the audience. The pleasurable components of these products are found in the lowly status accorded to the second term of each coupling, whether the escapist fantasy of the commercial, the narrative engagement of drama, or the delight of entertainment. In fact, it is this aspect of pleasure that is surely missing from most envisioned forms of information design – for both designers and audiences. We need to recover the idea that information design can be both enlightening and entertaining, illuminating and delightful, practical yet fanciful.

which information forms have blended together. The video arcade has displaced the virtual office of desktops and windows as the interface metaphor of choice. Interestingly, Wenders uses an animated "Bounty Bear," whose head twirls and hands gesture during the waiting period of extensive data base searching, turning "real time" down time into momentary leisure time for its users, as a spinning head replaces the Macintosh clock. In his analysis of *USA Today's* info-graphics, J. Abbott Miller discusses the hybrid nature of the Everyman figures that populate the charts and graphs of the newspaper, a fusion of "Otto Neurath's severe 'information man' and the more approachable Elmer Fudd: they are info-toons for the infotainment age." Both serious statistical figures and cartoon

Hybridity and the Information Product

1 characters share a similar reduction: the
2 simplicity of the pictograph as a figure
3 reduced to its bare outline and the
4 simplification of the cartoon as a character
5 reduced to the exaggerated expressivity
6 of caricature. What the pictograph lacks –
7 personality and specificity – the cartoon
8 supplies, but I wonder if these two sides of
9 visual reduction and expressive exaggeration
10 are not, in fact, the same side of the coin?
11 If so, what does this portend for a design of
12 reduction versus a design of expression?

Unfolding Information

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Blauvelt

**I wonder if these two sides
of visual reduction and expressive
exaggeration are not, in fact,
the same side of the coin?**





Mutant Identities for Mutable Media

This scene from Wenders's film is merely the technological updating of the traditional surveillance roles performed by information technologies. The policing function of the nineteenth-century photographic archive of criminals and the work of the sketch artist are "sped-up," but still perform the same function of picturing "true" identities. The high-tech apparatus of the Bounty Bear program runs counter to the latest trends for identification, that match not external or surface appearances, like people's faces and fingerprints, but the internal genetic markers of DNA. The question of identity parallels the shifts in information theory from its belief in the presence of things as visible markers of what is true, to the understanding of pattern and probability as the basis for what is intelligible and likely. It is the code of internal genetic markers (a pattern) that is

Contained within the idea of presence is a belief in the fixed, stable nature of information markers. Such markers are fully and visibly present, no different than the "immutable" ink marks you are now reading. In the binary world of presence and absence, it's either there or not there; things are this or that. However, within the dialectical world of pattern/randomness, things are much more fluid and are always in the process of becoming (changing); things can be both this and that. Recognizing patterns makes things intelligible. Pattern recognition depends upon continuity and predictability, in essence, stability. But stable systems are susceptible to change, either purposefully imposed or through the effects of entropy. The introduction of new information into a system disrupts its existing pattern, thereby changing that system. It is randomness,

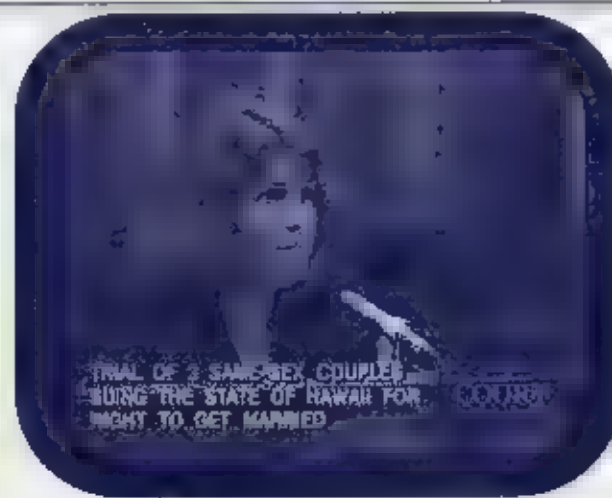
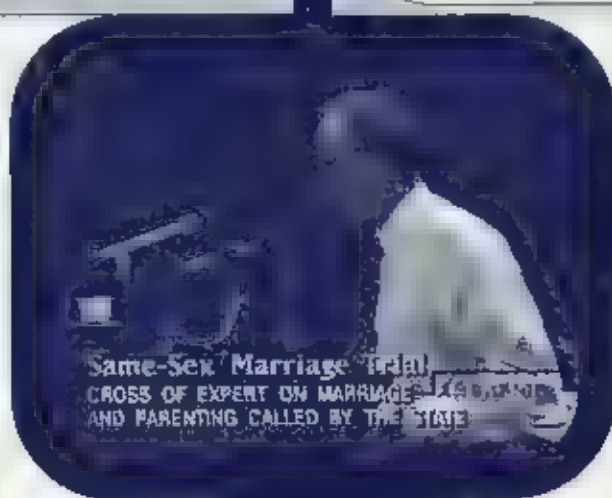
Unfolding Information

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Blauvelt

Within the dialectical world of pattern/randomness, things are much more fluid and are always in the process of becoming (changing); things can be both this and that.



displacing eye-witness accounts (a presence) in verifying truth claims in today's legal system.

a mutation, that interrupts the pattern. The mutation is an important event or defining moment when a system is undergoing change, because it marks the threshold from one state to another: "Mutation is crucial because it names the bifurcation point at which the interplay between pattern and randomness causes the system to evolve in a new direction. Mutation implies both the replication of pattern — the morphological standard against which it can be measured and understood as a mutation — and the interjection of randomness — the variations that mark it as a deviation so decisive it can no longer be assimilated into the same." It is the indeterminate nature of the mutation — the point at which it is neither completely pattern nor entirely randomness —

Mutant Identities for Mutable Media

that the either-or logic of presence and absence cannot readily incorporate. Hybrid forms, such as info-mercials, edu-tainment, and so on, represent a kind of mutation as they mark the threshold or boundary point between two different systems. The hyphen used in a word such as "docu-drama" serves both to separate and join two different forms: not documentary, not drama but documentary and drama. The notion of hybridity threatens the stability of any system built on a foundation of mutual exclusion.

Michael Jackson's 1992 music video, *Black or White*, provides a complex site for understanding the interaction of digital technologies and mutable identities. The famous and influential morphing sequence in the midst of that video, where men and women of different color transform gender and race, provides Jackson with a potent image of a fluid, seamless, multicultural experience. Each individual's identity yields and succumbs to the next as transformations possible with morphing technology produce a continuous stream of difference. This fluidity is an extremely important factor in the handling of such disparate physical characteristics. Every transformation is comprised of several in-between, or hybrid, states. The introduction of motion preserves continuity and acts as a kind of glue to hold the heterogeneous fragments together. In his

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The notion of hybridity threatens the stability of any system built on a foundation of mutual exclusion.



analysis of *Black or White*'s morphing technology, Greg Lynn compares it with Jackson's own bodily quest to be both "*black and white, male and female*," and concludes that Jackson's "*physical morphing... is monstrous because smoothness eradicats the interval between... discriminant characteristics without homogenizing the mixture.*"

The bodily image of the indeterminate hybrid – much like Jackson's facial surgeries – exists devoid of distinct origins, fixed for observation, while the act of morphing strives for continuity and smoothness, thereby easing us into the idea of indeterminacy, while allowing for a certain kind of narrative logic to unfold before our eyes as we watch one thing become another. Flow is the narrative. The idea of a contaminated purity that

Mutant Identities for Mutable Media

hybridity exemplifies – the debasement of “purer” forms – is at the heart of pejorative reactions. Historically, hybrids were first created as cross-bred plants or animals that exhibited traits or characteristics of both origins but were sufficiently distinct to create a new entity. Barbara Stafford, writing about hybridization during the Enlightenment, taps into the historical roots of the unacceptable nature of the hybrid: “The aesthetic claims of clarity and distinctiveness were more insistent as one mounted the evolutionary ladder. Elaborate theories abounded concerning the virtue of pure strains, the detection of good and bad combinations, and the presence of blazes or marks thought to denote inner constitution. All were predicated on the judgment that mixtures abstracted from normal procreation easily led to the monstrous.”

Stafford,
1991, 265

The mutable nature of digital media, including and especially morphing technology, allows us to envision the seemingly impossible (social harmony), visualize the ineffable indeterminate (not-man/not-woman, not-black/not-white), and flirt with the thrill of fantasy and terror (to be the other). The mutable nature of information in digital form means that it is not only more profoundly open to change and alteration but that it is expressible in many different ways and modes. This is, of course, the *raison d'être* of multimedia. The time-based, interactive and sound possibilities found in multimedia dramatically extend the expressive range of choices for delivering information. This possibility of “manyness” contained within the digital oneness of binary code is more than the battle between terminology (multimedia versus unimedia). It is the

Unfolding Information

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Blauvelt

Multiplicity is to be found in the recognition of the information event as something more than the place of information, and instead suggests a performance where information is both staged and experienced.



inherent multiplicity of digital media that must be considered. Part of this multiplicity is to be found in the recognition of the information event as something more than the place of information, and instead suggests a performance where information is both staged and experienced.

Unfolding Information / Unpacking Meaning

1 It's not just the space and place of infor-
2 mation (its punctuation) but its unfolding and
3 becoming in time (its mutation) that needs
4 to be considered. The concept of punctuation
5 (from the Latin, *punctum*, or point) as a
6 space or place holder, a shaper of meaning
7 and emphasis, is ultimately tied to the idea
8 of presence, fixity, and closure: an endpoint.
9 But with motion and time as added
10 properties, the idea of punctuation can be
11 expanded from the static idea of endpoint,
12 or space marker, and reconceptualized as
13 a dynamic point-of-departure: a mutation,
14 a fold in the surface of information, a
15 spatiotemporal marker. The dominance of
16 space as the constitutive fabric that
17 regulates meaning in graphic design has to be
18 radically augmented by the possibilities of
19 time to regulate meaning. Therefore it is
20 necessary to speak not of static objects

39 problems directly. But before addressing
40 these problems and opportunities, it is
41 necessary to revisit some recent grappling
42 with the spatial containment of information
43 found in the very kind of contemporary
44 graphic design that sent Vignelli packing
45 in the first place.

**"Since movement creates the event,
the real is kinedramatic. The
communications industry would have
never gotten to where it is today had
it not started out as an art of the
motor capable of orchestrating the
perpetual shift of appearances."**

— Paul Virilio

Unfolding Information

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Blauvelt



21 and mute figures but of performative events.
22 Peter Eisenman speaks of the same
23 contemporary condition to which architecture
24 must respond: "Architecture can no longer be
25 bound by the static conditions of space
26 and place, here and there. In a mediated
27 world, there are no longer places in the sense
28 that we once knew them. Architecture must
29 now address the problem of the event. ...
30 This is a new type of environment, comprised
31 of light, sound, movement, an event-
32 structure in which architecture does not stand
33 simply against media, but is consumed by it."
34 Eisenman realizes that architecture cannot
35 accomplish the dematerialization of physical
36 space the same way that certain media can;
37 however, because graphic design is a media
38 form it has the potential to address these

Eisenman, 423-4

Unfolding Information / Unpacking Meaning

Just as Robert Venturi was arguing for a semantic dimension to architecture in his 1966 book, *Complexity and Contradiction in Architecture*, where built form could express meaning, graphic designers were (and still are) similarly interested in how form can express meaning. Rejecting the reductive or subtractive approach favored by Swiss modernism, corporations, and information design, and instead employing an additive process of numerous elements in designs that rely heavily upon a collage aesthetic, certain designers seek, in theory, to link different elements with different levels of meaning. This layering approach frequently strives for a hierarchy in the information usually resolved by dividing the space into foreground, middle ground and background, and assigning various functions to these layers. The finished results favored a richly textured, dense fabric of

and articulated, round and square, structural and spatial. An architecture which includes varying levels of meaning breeds ambiguity and tension." Venturi goes on to state the virtues of such an architecture, which we might consider in the context of such graphic design experiments: "Most of the examples will be difficult to 'read,' but abstruse architecture is valid when it reflects the complexities and contradictions of content and meaning. Simultaneous perception of a multiplicity of levels involves struggles and hesitations for the observer, and makes his [sic] perception more vivid."

Venturi, 23

Venturi, 25

Unfolding Information

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Blauvelt



images and text that signals a more complex, even contradictory, approach to presenting information. The tightly organized field of information found, for example, in many grid-based forms of communication, gave way to a "reader-syntaxed" page where the audience actively "constructs" meaning from the available fragments. The layering process can be considered more inclusive than exclusive, and in this way parallels what Venturi had described in *Complexity and Contradiction* as the concept of "both-and": "If the source of the both-and phenomenon is contradiction, its basis is hierarchy, which yields several levels of meanings among elements of varying values. It can include elements that are both good and awkward, big and little, closed and open, continuous

Unfolding Information / Unpacking Meaning

1 I would like to suggest a re-reading of
2 Venturi's *Complexity and Contradiction in*
3 *Architecture*. In the early validation of
4 Venturi's concept of "both-and" used to ex-
5 plain or guide the use of layers in graphic
6 design work, another concept he discusses
7 was largely ignored: the double-functioning
8 element. Venturi describes the distinction
9 between "both-and" and the double-
10 functioning element as follows: "The 'double-
11 functioning' element and 'both-and' are
12 related, but there is a distinction: the
13 double-functioning element pertains more to
14 the particulars of use and structure, while
15 both-and refers more to the relation of part
16 to whole. Both-and emphasizes double
17 meanings over double functions."
18 The double-functioning element in architec-
19 ture performs two different tasks. For
20 example, a series of columns in a room has

39 about function and structure, not meaning.
40 It is necessary to join the possibilities
41 of multiple functions with the desire for
42 multiple meanings.

Venturi, 34

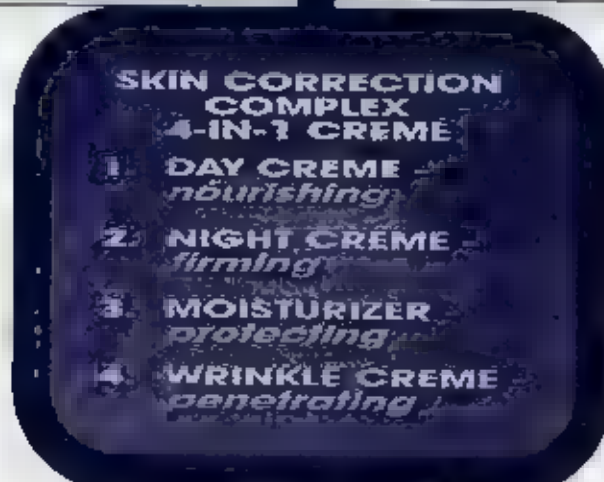
Unfolding Information

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Blauvelt

It is necessary to join the possibilities of multiple functions with the desire for multiple meanings.



21 the more obvious function of structural sup-
22 port, but also functions to articulate the
23 space of that room. Of course, it seems easier
24 in architecture to differentiate between
25 functions such as structural support or shelter
26 and communicative aspects such as "enter
27 here" or "this is a gathering place." In
28 graphic design it is difficult to separate
29 function from communication. Whether by
30 sheer novelty or some inherent property,
31 digital media appears to foreground issues
32 of use, function, and structure more readily
33 than most genres of print media. Digital
34 media demands attention to defining and
35 assigning specific functions as well as plan-
36 ning user experiences and program structures.
37 One could make a case that the overwhelming
38 concerns in digital media are - up until now -

Unfolding Information / Unpacking Meaning

The two dominant modes of information organization in print media (information architecture and graphic design) run parallel to the previous discussions about the logic of "either-or" and "both-and." Explicit organization of information, say for example in a grid system, encourages separation of elements and specialization of functions because spatial placement and articulation are thought to be essential for both perception and understanding. Explicit organizational schemes favor the exclusionary logic of "either-or." Implicit organization, for example in layers, discourages separation and encourages integration through the superimposition of elements and their simultaneous presentation, all of which tends to emphasize meanings over functions. Implicit organizational schemes favor the inclusive logic of "both-and." In contrast to

the same elements and present them alternately and immediately. Meaning can be tagged to temporal occurrence rather than spatial placement or layer. This prioritizes issues of time over arrangements of space. Position is fixed not as much by space as by time. What is also unique in digital multimedia to graphic designers, but not to film or video makers, is the time- and sound-based possibilities of narrative construction from multiple perspectives. Formerly constrained to two dimensions, graphic designers now have ready access to the fourth dimension and the properties of the visual, the verbal and the audio. What was previously relegated to layers of meaning and information, to text and image, can now be deployed in moving images and sounded text. In this scenario, it is channels, not layers, that are important. Curiously, very little has been done by graphic

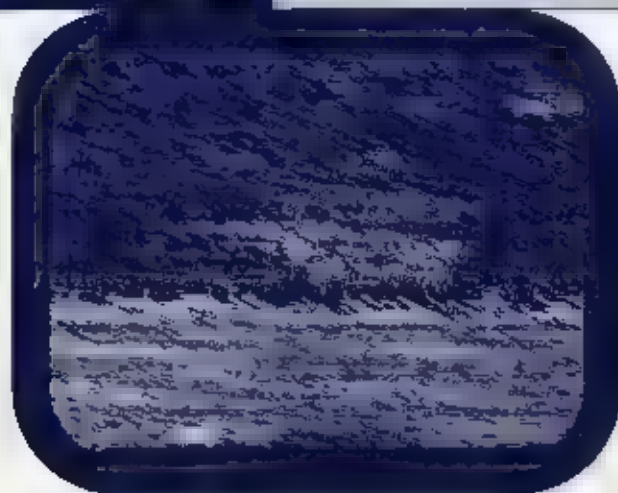
Unfolding Information

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Blauvelt

The double- or even multiple-functioning element in digital media encourages juxtaposition that fosters the act of comparison, between this and that, in managing the complexity of information events.



both explicit and implicit forms of information display, the double- or even multiple-functioning element in digital media encourages juxtaposition that fosters the act of comparison, between this and that, in managing the complexity of information events. "This or that" – as distinct, even contradictory, moments – is possible in what we might call "switchable" or interactive elements that can express different functions and meanings through the time-based properties of digital media. In conventional print media, a designer must choose in advance what typefaces, what images, what texts are available to any potential reader, and these must be presented simultaneously on the surface, or perhaps successively in a series of pages. Digital media can organize

designers to utilize the possibilities of these various channels; rather, most graphic work for and about digital media, especially in print, still features layers.

Unfolding Information / Unpacking Meaning

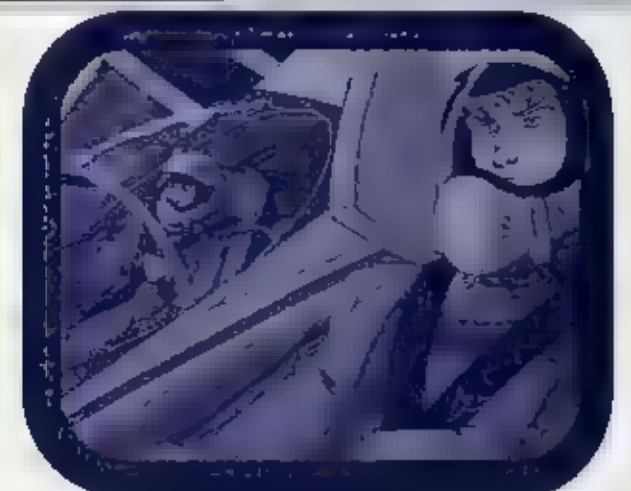
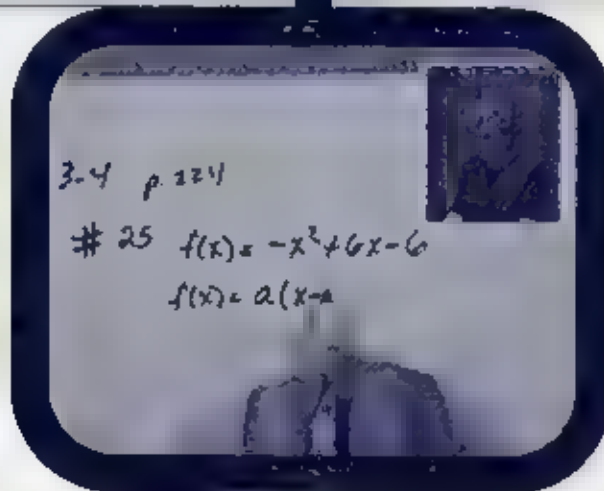
1 Graphic designers must move away from
2 thinking in solely simultaneous, static, and
3 visual terms and consider the multiplicitous,
4 dynamic, audio-visual confluence that is the
5 complex and contradictory nature of infor-
6 mation. Digital multimedia has a potential to
7 express the hybrid nature of information
8 whether explicit or implicit, demonstrative or
9 suggestive. Information can move from being
10 displayed to being performed – and not just
11 animated – but rendered as the complex
12 phenomenon it represents.

Unfolding Information

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Blauvelt

**Digital multimedia has a potential
to express the hybrid nature of
information whether explicit or
implicit, demonstrative or suggestive.**



In(ter)active Displays and Performative Play

The performance of the information event demands its staging (display) and interaction. Audience engagement is crucial, which means considering anew the assumptions of "passive viewers," "active readers," and "interactive users." The entire spectrum of viewers/readers/users needs revision, as these formerly distinct audience constructions are collapsed in the single medium of multimedia. The dynamics of the information event – who or what is active, passive, and interactive – could learn much from current research about cultural identities. Not only are identities much more hybrid and mutable – just like information – they are also understood to be both performed and narrated. This kinetic dimension is echoed in Paul Gilroy's comment that identity is a function of becoming more than one of being. Or as Edward Ball states: "A constructed

Gilroy, 24

disclosed and even disguised in masquerading performances of multidimensional perspectives. Such a collusion between the deceptive and the apperceptive occurs in the complicitous dynamics of "passing," in which individuals trade on their ability to appear "true" while trespassing categories such as sex and race. Passing "succeeds" through misrecognition and misinterpretation, in essence, through miscommunication.

Ginsberg, 1996

Unfolding Information

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Blauvelt

The entire spectrum of viewers/readers/users needs revision, as these formerly distinct audience constructions are collapsed in the single medium of multimedia.



ethnicity is a national, regional, sometimes racial identity produced in the presence of, and for, a spectator. This performative dimension within ethnicity is based on the presumption that culture is not written, as theorists of language might build their metaphor, but staged."

1995, 144

The staging of identity means that the dynamics of looking have been reconfigured as the formerly static, passive object under observation becomes a subject to be seen. Craig Owens reminds us that "...to pose is, in fact, neither entirely active nor entirely passive..." and reflects a choice on the part of the subject as "the subject poses as an object in order to be a subject." The "true" nature of information, preserved as it is in visual, two-dimensional form, can be

Owens, 214-15

In(ter)active Displays and Performative Play

Dustin Hoffman, cross-dressing in *Tootsie* (a precursor to the gender-bending themes in vogue during recent years), passes as Dorothy Michaels – a performance that allows the performer access to another world, another culture, and even another career. As a performance, passing is always subject to exposure – the danger that the impostor will be revealed. Although many people in *Tootsie* suspect something is “not quite right,” they inevitably recognize and accept Dorothy as a woman until she is revealed or chooses to reveal her “real” identity. Dorothy exhibits the hybridity of being between cultures. Others perceive Dorothy as neither a man nor a woman; sometimes a man, sometimes a woman. Identity for Dorothy Michaels / Michael Dorsey is context-specific and time-dependent. Although the elaborate physical transformation of actor to actress is

The hybrid world of info-tainment is predominately read as entertainment passing for information. But what if information performs “in drag,” masquerading as entertainment? Do we have what Edward Tufte calls “chartjunk” or ugly graphical “ducks?” Certainly Tufte favors the “self-effacing” or transparent reflection of information over the data distortions and visual excesses of chartjunk: “*Chartjunk promoters imagine that numbers and details are boring, dull, and tedious, requiring ornament to enliven. Cosmetic decoration, which frequently distorts the data, will never salvage an underlying lack of content. If the numbers are boring, then you’ve got the wrong numbers. Credibility vanishes in clouds of chartjunk; who would trust a chart that looks like a video game?*”

In his case against chartjunk, Tufte quotes

1990, 33

1990, 34

Unfolding Information

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Blauvelt

The hybrid world of info-tainment is predominately read as entertainment passing for information. But what if information performs “in drag,” masquerading as entertainment?



accomplished through make-up, wigs and costumes, it also encompasses the verbal, gestural and behavioral attributes of a caricatured gender. Each item in the ensemble functions to create the illusion as well as to break it. Gendered voice is used strategically by Dorothy as she chooses to reveal her “true” identity to her manager (Sidney Pollock); which is to say, Michael Dorsey chooses to drop his voice rather than his pants in order to “prove” himself.

Venturi et al from *Learning from Las Vegas* in order to support his thesis: “*In promoting Space and Articulation over symbolism and ornament, they [Modern architects] distorted the whole building into a duck.*”

Tufte could have only used this quote to support his arguments because he does not see how his “self-effacing” diagrams – just like Modern architecture’s “glass boxes” – are loaded with symbolic meanings. Tufte’s functionalist aesthetics can be exposed if we invert the terms of his previous statement; who would trust a video game that looks like a chart?

1990, 33

In(ter)active Displays and Performative Play

Common ground may be found in the desire for a variety of positions through which a more complex understanding of information can be arrived at. The display of information is not a linear narrative and therefore allows for multiple pathways, and when complex enough, multiple positions from which to analyze the data. Each of these paths and positions performs a distinct function. The complexity of information is a direct product of the multiple functions that provide a variety of vantage points from which to experience the data event. This moves the idea of multiplicity away from the "liberal pluralist" declaration of infinitely diverse audience readings of one text (or display) and toward the kind of multiplicity found in the double-functioning element: a number of critical vantage points that serve to construct the complex, sometimes contradictory, nature of "true" information.

These acts of display extend beyond the reversal of the roles of observer and observed as they implicate the act of looking in a much larger web of actions, expectations, and functions. The implication of a complicit, and active, audience has been provocatively addressed by Néstor García Canclini, who argues: *"insofar as [identity] is a narrative that we are incessantly reconstructing, and reconstructing together with others, identity is also co-production."* The passivity normally associated with viewing film, for example, can be quite engaging (and therefore active) not only because of content but also because it is an immersive medium (to borrow a term from virtual reality). Conversely, the activity most associated with interactive media comes not from choosing but from clicking. Consequently, our notions of what constitutes activity and passivity as

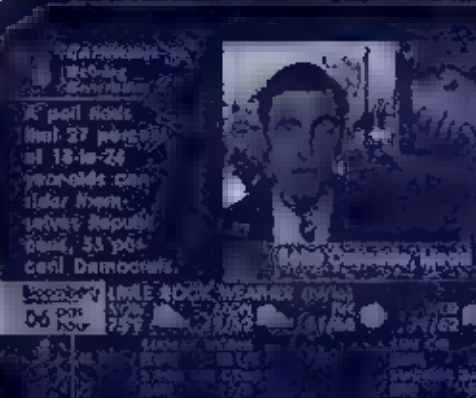
Concl.ni, 39

Unfolding Information

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AND NOW A WORD
FROM
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(co-)participants in information display and spectacle need to be rethought with more attention paid to the complex dynamics that actually govern the processes of perceiving, interpreting, and experiencing information.

An Erotics of Information?

Design historian and critic Robin Kinross, in a letter to the editor, commented: "Meanwhile, dried-out information design – so far not considered in the pages of Eye – has to struggle on, the possibility of pleasure denied to it." Kinross's comment resonated with me, but not in the way he would have intended. Where is the pleasure of information design? Part of the problem, as I stated at the beginning of this essay, is the implausibility of information with pleasure. In fact, it is the dichotomy between the informative-as-serious and the entertaining-as-pleasurable that needs to be uncoupled. Ien Ang, a media scholar of television, notes how such an oppositional system between information and entertainment helps to shape and reinforce distinctions in the minds of viewing audiences: "Of course, this doesn't mean that audience preferences are only

The revision of such a dichotomy is particularly important at this moment in the development of digital media networks and products, which are, each day, battlefields for various interest groups (corporations, schools, entertainment industries, the state, etc.), who would like to imprint their particular consumption patterns and information preferences on this "marketplace." Each of these constituencies brings to the new media a predisposition of how they formulate, regulate, even negate aspects of pleasure in older media forms. These older forms – whether predominately televisual, filmic, aural, or print-based – must negotiate the specific contexts, limitations and possibilities of digital media products, networks and environments.

Unfolding Identities

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Blauvelt

It is the dichotomy between the informative-as-serious and the entertaining-as-pleasurable that needs to be uncoupled.



directed toward programmes which fall into the category of 'entertainment'. Indeed, the institutional categorization of televisual discourse, which constructs an opposition between what is serious (=what really matters) and the popular (= easy pleasure), obscures the fact that, from the point of view of audiences, 'information' can also be pleasurable. The problem is that in televisual discourse 'informative' programmes, especially when they are about 'serious' politics and culture, are too often constructed as the important—and thus unpleasurable— which viewers are supposed to watch because it is 'good for them'."

Ang, 31

An Erotics of Information?

Another part of the problem is the association of pleasure with audience duplicity or "mass deception," rather than examining its capacity for engagement. In this line of thinking, media forms themselves are debased, particularly if they are predominately visual, such as television, film, video, and now digital multimedia. These media are characterized as the harbingers of depthless spectacles, leaving viewers mesmerized. However, viewer engagement in forms of spectacular display are characterized and categorized by Stephen Greenblatt as instances of exhibitionary wonder and resonance: "By resonance I mean the power of the displayed object to reach out beyond its formal boundaries to a larger world, to evoke in the viewer the complex, dynamic cultural forces from which it has emerged and for which it may be taken by a viewer to stand.

Of course, with Tufte it's always the data that does the talking and has the last word. Another revision might be what Barbara Stafford has noted as the historical use of spectacular displays of "sensationalized knowledge" in the Enlightenment as a means for "informed looking" in her concept of an artful science, "lying somewhere between entertainment and information, pleasure and learning." Stafford sees the spectacle as a pedagogical tool, an instrument for knowledge, through what she terms the "performative gaze." It is also necessary to acknowledge the power of special effects, as Scott Bukatman does in his analysis of the "technological sublime" in science-fiction films, to induce awe as well as "balance sensory pleasure and cognitive play."

1994, xxiv

Bukatman, 289

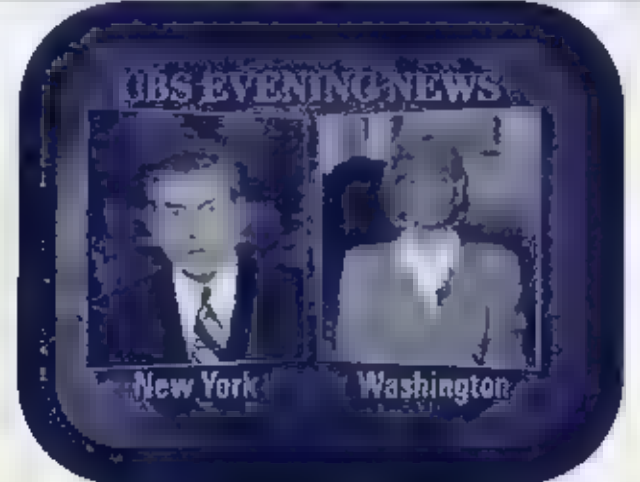
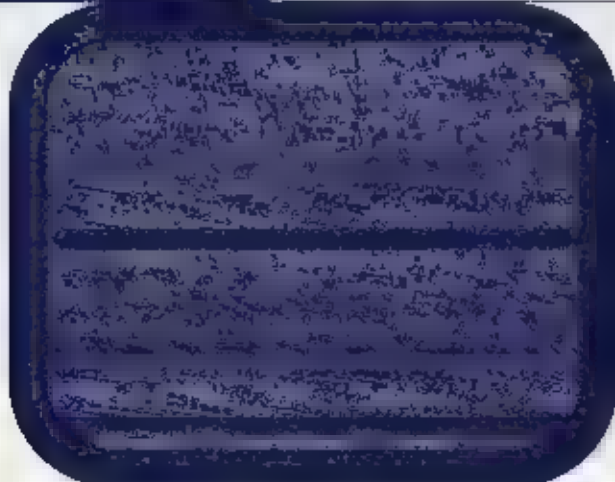
Unfolding Identities

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Blauvelt

Another part of the problem is the association of pleasure with audience duplicity or "mass deception," rather than examining its capacity for engagement.



By wonder I mean the power of the displayed object to stop the viewer in his or her tracks, to convey an arresting sense of uniqueness, to evoke an exalted attention."

Greenblatt's reciprocal merger of a "wonderful resonance and resonant wonder" is but one possibility for acknowledging the power of display to both arrest the viewer and engage him or her in reflection, reflexivity and contemplation. Perhaps even Tufte can agree: "The best designs... are intriguing and curiosity-provoking, drawing the viewer into the wonder of data, sometimes by narrative power, sometimes by immense detail, and sometimes by elegant presentation of simple but interesting data."

Greenblatt, 42

Greenblatt, 54

Tufte, 1983, 121

An Erotics of Information?

Not only must the supposed duplicity of pleasure be countered but the repertoire of devices used in display needs to be recovered from their consignment to Hollywood mastery. This means a critical, strategic use of rhetorical devices and special effects such as framing, cropping, positioning, sequencing, montaging, morphing, slow-motion, fast-forward, instant replay, juxtaposition, superimposition, split-frame, freeze frame, voice over, jump cut, and so on, that need to be brought to bear on the problem of representation in kinetic and interactive environments. Ella Shohat and Robert Stam provocatively argue for what they call "pedagogic jujitsu," using the tools and grammar of media against itself to reveal suppressed information, articulate alternative viewpoints, and engage spectators in a more active form of viewing they call

The problems of visual display demand attention be paid not only to the heterogeneous mixture but also to the possibilities of unfolding meaning and unpacking content. This means speaking less about layers and more about channels of information, not so much for a fashionable eclecticism but for an eclectic self-fashioning. It means using both the mechanics of display and the pleasure of play to communicate information in mediated experiences. It means fusing the exclusions of "or" with the inclusions of "and." It means looking at the fusion of categories such as edu-tainment and info-mercials, as well as things like ficto-criticism, as possibilities for engagement rather than signs of debasement. It means asking if there is an erotics of information display, a seduction in the art of performance.

Unfolding Identities

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Blauvelt

The problems of visual display demand attention be paid not only to the heterogeneous mixture but also to the possibilities of unfolding meaning and unpacking content.



spect-actorship. Similarly, we need to rethink notions of "interactivity," understood mainly as "options," and exchange it for positions; differing perspectives and conflicting points-of-view.

Shohat & Stam, 1995



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Blauvelt

Portions of this essay were presented in lectures at Cranbrook Academy of Art and the Jan van Eyck Akademie. Andrew Blauvelt leads a hybrid life in Raleigh, NC, where he is Director of Graduate Studies in Graphic Design at NC State University.

END



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Recombinant Bodies

By Diane Gromala

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I was standing in Fremont at the center of the universe the other day, waiting for the light to change, talking to a rather enlightened if underfed computer scientist. This is a goofy, oddly busy section of Seattle, where a handmade sign points in all directions, from Tacoma to Timbuktu, from Paris to Mars; where official "one way" signs are amended to read "our way;" where an old junior ICBM rocket rises from the corner of a junk shop; and where a cast-off statue of Lenin from the former Soviet Union towers, pointing over an empty parking lot. The computer scientist was asking me what I'd design once I got my hands on nanotechnology.¹ It seemed a startling, foolish question about fringe technologies that seemed too ludicrous to even consider, like designing a computer from a vat of DNA soup. But it was also one of those rare times when a computer scientist took the designation of design to mean both what he did and what I do,

so I thought it deserved at least a cursory consideration.

Recombinant Bodies

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Gromala

1. For an accessible introduction to nanotechnology, see Ed Regis, *Nano: The Emerging Science of Nanotechnology*, Boston and New York: Back Bay Books, 1995.

2. The VRD (Virtual Retinal Display), based on the concept of scanning an image directly onto the retina of the viewer's eye, is being developed at the Human Interface Technology Lab, the University of Washington, in conjunction with Micro Vision, Inc., Seattle.

3. Donna J. Haraway, THE PROMISES OF MONSTERS, A REGENERATIVE POLITICS FOR INAPPROPRIATE/D OTHERS, in *Cultural Studies*, Lawrence Grossberg, Cary Nelson, and Paula A. Treichler, eds. London and New York: Routledge, 1992. p.296.

What would I design if I had access to nanotechnology's promise of microscopic robots that could manufacture anything, starting from scratch, with molecules? I wondered what drove me to design, what subjects obsess me most. We crossed over to the Fremont Bridge, where I could see the vestigial smokestacks of an old factory, now home to Zymogenetics – or is it Pathogenesis – a company that does genetic research. It reminded me of the piece of vernacular graphic design that had most affected me in San Francisco, a hand-scrawled message pasted to the lightpost near Genentech that read, "What if AIDS is man-made?" At first, it seemed a silly cliché, but every person who passed it seemed to hesitate for more than a moment reading that sign, before they opened the door, before they dismissed it as unthinkable or irrelevant.

I thought about the retinal scanner² I had seen the day before, which projects a stereoscopic, virtual reality (VR) image directly onto the retina. The image is beautiful, the technology scary, the device, ugly. It could stand the help of an industrial designer, I was certain. But I was at a loss as to nanotechnology and designers. I couldn't bring myself to say to the computer scientist, "bodies." It was a perverse thought.

Nonetheless, the question of nanotechnology and graphic design led me to wondering, again and again, what the relationships are among design, bodies, and technology. How do they continually and mutually constitute each other? What are the multiplicity of lenses through which we can look at these interrelationships, and where can we, as "planetary fetuses gestating in the amniotic fluid of terminal industrialism"³ stand in such a viewing?

Design: Twanging Enervating Strands in a Very Loose Weave

If we consider graphic design to be both a reflection of the culture within which it is situated, and an influence on that culture in a kind of on-going feedback loop, we have an implicit role in representing bodies, feeding and being fed by cultural understanding of bodies in specific ways. But theorizing the relation of bodies, design, and technology is a sticky matter, not so easily reducible to a design/culture or a symbolic/material feedback loop. If we follow the thinking of Jacques Derrida in relation to writing, the "subject of design does not exist, if we mean by that some sovereign solitude of the designer. The subject of design is a system of relations between strata . . . In order to describe the structure, it is not enough to recall that one always designs for someone; and the oppositions sender-receiver, code-message, etc., remain extremely coarse instruments."⁴ What is involved is an extraordinary complex of interrelated factors, irreducible to the intentions of the designer and the effects of that design.

In their struggle to carve out and legitimize a profession, practice, vocation, and

4. Jacques Derrida, FREUD AND THE SCENE OF WRITING, in *Writing and Difference*. Trans. Alan Bass. London: Routledge and Kegan-Paul, 1978. pp. 226-227.

5. Paul Rand defined design as "an intention, a plan" to the Yale graduate class of graphic design in the winter of 1990. Work of earlier classes suggest this was a longstanding tradition. It should be noted that this was a reflection of the intellectual and wider cultural milieu within which Rand's major body of work was situated. It is important to note that my position does not dismiss this view, but includes the intentionality of the designer as one factor among many that merits careful consideration.

6. This is a notion that borrows from Katie King's articulation of the apparatus of literary production. Here, the poem congeals at the intersection of business, art, and technology.

discipline, it seemed necessary for graphic designers of the post-World War II era to focus almost exclusively on the intention of the designer from the perspective of a designer. From this perspective, as Paul Rand is fond of saying, design is "an intention, a plan."⁵ Therefore, the intentionality of the designer was paramount to all other considerations, parallel to the primacy of the author's intention in literature. But just as theorists from the humanities have pointed out – particularly in the past 30 years in thinking about literature, design, photography or other cultural works – the creation, interpretation, and use of that work does not exist in a vacuum. Its use, effects, interpretation, value, and context are just as much a part of what needs to be examined. In taking these into consideration, the meaning of a specific design work then is not stable, not universal in its meaning for all people, for all time.

"The designer" creates a work, bringing to it a series of culturally influenced or determined assumptions, perceptions, and ways of understanding, creating, and producing. In this sense, the designer is not the singular originating point of the work but a player in what may be seen as the apparatus of a specific form of cultural production.⁶ The apparatus includes the designer, the design community, clients, and a host of others who produce, deploy, and consume the work. Such an apparatus is deeply informed by social, economic, and technological factors. The designer, thus implicated in a web of power relations – in a specific cultural context that informs the act of designing, the distribution of the work, and the understanding or consumption of that work – stands amid and negotiates multiple and dynamic forces, forces potentially at odds with one another.



A performing artifact at the intersection of business, art, and technology, "the design work" itself acts to produce and facilitate certain forms of communication, reproducing social relations, reifying or causing interference patterns in cultural understanding, an instrument, great or infinitesimally small, of social change. The design work, now out of the hands of the designer, may have multiple lives, some intended by the designer, some wholly unintended. The design artifact lives in its intended use, many times extended by users or clients in contexts not originally defined at the time of its creation. It lives in reproductions among communities of designers, "quoted" or partially appropriated by other designers, mutating, understood or misunderstood over time, over geographic dislocations, reinserted to a multiplicity of ever-changing "contexts."

The "audience" of the design work, as the term implies, was once thought to be comprised of passive, homogeneous recipients of a predetermined meaning, a meaning ordained exclusively by the designer. Redefining the audience as a "user," negative connotations notwithstanding, refocuses this, implying a co-creator of meaning. The interpretation and use of the design work by users – hardly the static and embalmed design works familiar in reproductions in books and journals,

Recombinant Bodies

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Gromala

7. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* Trans. Brian Massumi, Minneapolis and London, University of Minnesota Press, 1987

torn from their rich and diverse contexts – is partially constructed by them, contingent always on their cultural field of view.

Another way to look at the vast web of factors and forces that comes to bear on understanding design is to refer to the ideas of Gilles Deleuze and Félix Guattari.⁷ We may consider all of the factors that are involved in design as loosely interwoven threads, woven as a sort of Mobius strip. Following any one strand necessarily implicates many of the overlapping others. Plucking any one of the points of overlap reverberates throughout the weave.

Underlying all of these influences on design, implicitly, somewhere, are bodies: traces of the designer's hand, eye, and psyche in the creation of the work; hauntings of designers who have come before us; unseen fingerprints and sweat of those who produce and distribute the work, the drives of clients, the responses evoked within users' bodies, and the passing on of the design work to users yet unborn.

Entertwining Bodies, Technologies, Design

I confess to an obsession with books, a bodily addiction. I have read, slept in, and awakened to a nest of books. An odd child, I learned to reproduce letterforms with a vengeance, winning grade school penmanship awards, painting my bedroom wall with organic typeforms that could be read in the blacklights of the late 1960s. It was more than simply a matter of form, however. Letters formed words, and words were my fictive, virtual worlds. I secretly consumed dictionaries, encyclopedias, novels, and medical books. I spent untold hours wrapped in these cocoons, immersed in my own and others' imaginary realms.

Later, when I called myself a graphic designer, I was finally able to legitimize my lifelong obsession with letterforms everywhere – the typography at La Guardia and the London Underground, the glint of golden script on mosques in Istanbul, the credits at movies, the letters in sidewalks and manhole covers, the swirls of my can of Coke. It was okay, then, to spend sleepless nights “massaging” typography, fingering the impression of metal type in soft rag paper, half transported to

Recombinant Bodies

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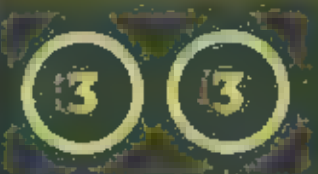
Gromala

8 The *Hypnerotomachia Poliphili* (variously translated as “The Strife of Love in a Dream,” or the “Dream of Poliphilus”) was authored by Francesco Colonna and printed by Aldus Manutius in 1499. The book is often hailed as a masterpiece of the incunabula, and purportedly influenced Caracci’s fresco in Palazzo Farnese and Goethe’s *Faust*, among other works that continue to the present.

another world through intense concentration, sleep deprivation, the fumes of fresh ink, and the monotonous clanking of printing presses. The bodily frustration I endured, through torturously rendering letterforms with plaka, was ameliorated only by the rare occasion of painting the curve of a shoulder just so, so precisely that it made my teeth sing. And at last, when I turned the pages of the *Hypnerotomachia Poliphili*,⁸ a book of the incunabula that I had seen reproduced again and again in design history books, my heart raced in my ears, my palms sweat. Here were the last vestiges of pagan rituals, meant to be saved from extinction by the forces of Christianity in 1499. The author(s) somehow safely preserved them in an elliptical, “fictional story” of a dream, and in the extreme expense of the book – it wasn’t much of a threat to Christianity if there were only a few copies held by a handful of nobles. What I regarded as an icon of graphic design turned out to be an erotic tale, full of naked maidens gleefully dancing with scythes around an equally and frontally nude, if bound, man. The book is full of depictions, in text and images, of desire, of unbound lust and yearnings, full of sensuous typography and odd architectural detail. A virtual world, as it were, having to do with bodies, meant to provoke responses in other bodies.

A couple of years later, when I first “immersed” myself in a stereoscopic, three-dimensional virtual reality (VR) world, I was stunned at how fully and forcefully my body reacted to flying around the simulation, despite my cynicism toward the VR hype. Somehow, in ways I couldn’t quite articulate, my response was similar to the way I felt when I beheld the *Hypnerotomachia Poliphili*. So I suppose it was no mystery then, that I ended up designing my own fictional VR world, comprised of a

inthisworldtogether



Triggs / Worwicker

i write music to hear the sounds i've never heard before john cage

rdlyholover
m ca
ion angelas
999

john warwicker @ tomato

ever since i was a young boy i've been interested in the process of drawing. my summer holidays were spent at my grandparents house on the south coast of england. i was as inquisitive as any seven year old and loved going for long walks across the sussex downs with my grandfather. he seemed to be so old and wise that i felt i could ask him anything and he would tell me the answer. one of our favourite places to walk to was to wilmington. there, a large prehistoric chalk figure some 200' long, was carved into the chalk hill. it was a place of magic and wonder and it fuelled my interest in drawing. i loved the idea that there was continuity in the process of mark making. it was, without question, a completely natural thing to do. i often dreamt of my own drawing, that size, embedded in the hills, seen by people in the distant future. for me, it rooted the experience of drawing in the process of time. i could also draw with the chalk which meant that the material could be the object and the subject; i was drawing with the material of the hill and that material was somehow transmuted by the process of drawing into an image.

as
film and sculpture and discourse and writing and paint and music and walking and drawing and memory and philosophy and composition
film is sculpture is discourse is writing is painting is music is walking is drawing is memory is philosophy is composition is form is

The Rose Garden in Holland Park is an oasis of peaceful solitude hidden amongst one of London's bustling residential areas. A middle class haven for mums pushing baby prams and Japanese tourists out for floral delights, the garden appeared to be an unlikely venue for a meeting with London's infamous graphic design anarchist, John Warwicker of Tomato. These initial thoughts were confirmed when the tranquillity was shattered as John came bouncing confidently down the garden pathway dressed in a black t-shirt, Levi's with 4" cuffs turned inside out and trainers, and donning a set of Sony headphones, cd walkman and some all-essential Arnett sunglasses. He was in an upbeat and chatty mood indicating that things were going very well for him. It seems for Tomato everything is coming up roses.

More than this, John reminded me of someone. For a few moments I was unsure of whom that might be. Then, yes. John's relaxed appearance was akin to the photographs I had seen of the 1950s American Beat writer Jack Kerouac. As an individual and part of a tightly intertwined collective, Kerouac had formulated an identity based upon "literary aesthetics" and "personal content". Forty years on, I suspected John Warwicker and Tomato were hoping to do the same.

**When daybreak
came we were
zooming through
New Jersey with
the great cloud of
Metropolitan New
York rising before
us....**

**Jack Kerouac,
On the Road, 1955**

John had just flown in that morning from a whirlwind business trip to New York City where he had met with the top photographer, Albert Watson to discuss the designs for Watson's new book, 'Roadkill' and, to begin work on a new Reebok television commercial. In talking about the city it was obvious that John enjoyed the fast pace nature of New York life. Several years ago John and fellow Tomato member Karl Hyde produced Skyscraper, I Love You: a Typographic Journal of New York (1994), capturing visually a journey through the city. Much like the *dérive* associated with the Situationist International, the book's black and white experimental typographic treatments reflect the brisk and hectic movements found in NYC spaces. However, the book also documents a second journey or process. This time it is the underlying rhythmic narrative for the album *dubnobasswithmyheadman* recorded by Underworld, the Tomato-affiliated, Brit technopopsters currently residing number four in the charts with their latest single, *born slippy*, from the film 'Trainspotting'.

But, despite his enthusiasm for New York and the last twenty three visits, John seemed relieved to find himself back home. We settled underneath the umbrella of a cafe table laid out with bottled water, tea and cheese Danish. I had been given the freedom by Emigre to produce a slightly unorthodox piece.

I knew that it could not be constructed as a conventional interview. Tomato, and John himself, had been instrumental in building a reputation for developing a philosophy concerning, new approaches to thinking about, design and communication. To settle for a simple question/answer session would not do.

teal triggs @ lcp & dt

I was of the opinion that the process of us working together on the piece in a collaboration would ultimately lead to a positive exploitation of each person's cognitive abilities and personal viewpoints. The process of exchanging ideas between a writer (myself) and designer (John) was to me, more interesting than the resulting designed artifact. For John, I understood this idea fitted perfectly with what he calls "interconnectivity". In other words, how the resulting links or collisions between the pathways may be mapped in order to document the experience of a journey. We agreed the piece should provide the "evidence" which mapped the developmental process of discussion, through our individual and collective journeys.

inthisworldtogether

I doubt whether this would have occurred to me had it not been for my grandfather pointing to all the elements surrounding us (roads, tracks, cultivated land, sky, clouds and sea) and then constructed analogies of how he thought the world worked through interconnectivity, evolution and journey - the roads were sculptural and the well worn paths across the hills were drawn marks, precipitation from the sea accumulated in the clouds and was deposited on and as rain, which in turn filtered through the soil, to the river, in order to rejoin the sea once more

my grandfather was a mathematician and the world he was describing was as far away as possible from my educational 'experience' of a world made up from discrete 'facts'. what I was being taught was at odds with what I was being shown, and the process of drawing continually reaffirmed this.

those long discussions with my grandfather objectified the abstract for me. a sequence of notation, basic signs such as letters, numbers or mathematical forms set in relation to

and form and framing and text and dreaming and mathematics and movement and seeing and typography and photography and poetry

framing is dreaming is mathematics is movement is seeing is typography is photography is poetry is choreography is sound is

each other could mean a simple sum or a calculation estimating the weight of a galaxy. in using the same letter in either the sum or the calculation showed me how the relational and contextual aspect of signs gave that letter meaning. it wasn't the object itself but a model of the object. in my grandfather's analogies, however, the objects themselves became signs in order to express an abstract idea - what had seemed to me to be a concrete form of description suddenly became unstable and open to interpretation and expression. the compulsion to record my experience of the world was automatic; what my grandfather had galvanised, however, was an awareness of the means of description and the possibility and validity of my own journey and interpretations of that journey.

everything in the world
has its own spirit which
can be released by
selling it into v-bration.

askar fischinger
polyholycor
moca
los angeles

**I stomped on the accelerator as we hurtled
back onto the highway. Moments later he
leaned over with a map.**

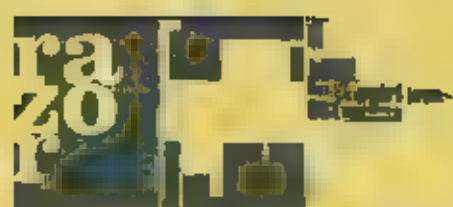
Hunter S. Thompson,
Fear and Loathing in Las Vegas, 1972

bop prosody

Hit the Road²

The cafe's umbrella had protected us from a sudden summer shower. We were on our second cup of tea when our conversation became more anecdotal. In some ways I think we were trying to catch up on what we had each been doing over the last few years. John and I had met originally in 1990, while both teaching on the MA Graphic Design course at Central St. Martins. Our pathways had crossed only a few times since, and then only briefly at private views or design conferences.

We had both continued to be involved in design education. John as an external examiner and advisor to graphic design courses in the UK, and myself as a lecturer at the London College of Printing and Distributive Trades. In our reminiscences, John reiterated his firm belief that all design students needed to know how to write, suggesting that writing forms part of the process of 'sculpting information'. I concurred. The ability of students to articulate their views and work in a variety of ways within the context of the [commercial] world is essential.



an object no longer existed by itself but was forever referring to and being informed by the act of making, which in turn was being referred to and informed by the philosophical and cultural context within which both act and the object exists. it was obvious that there are no rules to either obey or express; there is only the moment of (intuitive) perception using the means available at the time, no matter what form or language this might take

this, of course, is post-rationalising. in my early teens, however, my 'discovery' of the painting entitled "ce n'est pas une pipe", by rene magritte, gave immediate and concrete form to the picture-language game, set in motion many years ago in the sussex countryside. it wasn't a 'real' pipe but a painting of a pipe. i then realised that it wasn't even this but a reproduction of a painting of a pipe. the juxtaposition of text and image within the painting seemed to underscore the belief in the mutability and relativity of the sign, and the specificity of material and context, and the discourse between the act of making and the conceptual

the time of the technical operation is not a stable, unified, homogenous reality, from which knowledge can be gained, it is the time of seized opportunity, of *kairos*, the point when human action meets a natural process that develops according to the rhythm of its own duration. this moment is a singular one, and cannot be the object of any science or art, since the judgement of art proceeds from the universal,

land art
p140
referring to aristotle
metaphysics, a 1, 981 a 5-7
see pierre aubonne. la
prudence chez aristotle
(paris: p.u.f., 1963) p.102
1993

as

and choreography and sound and architecture and film and sculpture and discourse and writing and paint and music and walking and
architecture is film is sculpture is discourse is writing is painting is music is walking is drawing is memory is philosophy is composition

The written form is evident in most of John's commercial and personal work either in the process of thinking through an idea or through the visual exploration of words and typographic experimentation. The visible word has a long and well established history in the art world. The Futurists, Dadaists and Cubist artists, for example, were closely connected with the literary world in producing personal languages of meaning and visible materiality.

this encouraged me to draw because it was the most direct form of expression and transformed the act of looking into seeing. the work that resulted from this process was the map of my journey.

at tomato we bring a map (or maps) from one territory and overlay it on another to see what happens. this is how our individual work evolves in relationship to the group, which is the process of our collaboration

this article is a map of process. the condition and context of looking at a magazine sets out procedures and possible relationships that mean the work (in the sense that the discourse between yourself and this magazine) is never

drawing is the first visible form in my works. the first visible thing of the form of the thought, the changing point from the invisible powers to the visible thing. everything now comes together.

joseph beuys
thinking is form
p73
thames and hudson
1993

...not only were modern artists not concerned with form for its own sake, as either nonreferential or nonsignifying, but that they were fundamentally engaged with a persistent investigation of the process of signification which the relations between formal manipulation and content could not be dissolved.

Johanna Drucker, *The Visible Word*, 1994

The Beats were equally active in developing a language which represented aspects of everyday life, snatched conversations or continuous narratives of (un)conscious thoughts. Kerouac, William Burroughs, Neal Cassady, Allen Ginsberg all drew upon the Beat fraternity's autobiographical experiences blurring the boundaries between fiction and nonfiction; between art and life itself. John and the others at Tomato are in many ways pursuing similar strategies. Much of their work is developed through personal experiences which is then edited to enter into the commercial arena.

complete, closed or stable and it exists within the flux of all the other things in the world.

within this restless state of inquiry and response we are in it, part of it, and we are always trying to name it. our work (at tomato) is the evidence of this process and our relationship to it. however, it is within this discourse that the map begins to break down. the signs and the language of those signs (by which we orient ourselves in a situation) begin to look less like definitions and more like relativist propositions that question not only the means by which process is made concrete, but also to the activity itself (the conscious creation of a work)

In essence, the process itself has become Tomato's trademark. Just as in life, nothing in the Tomato milieu remains static.

the terms by which we define these activities have become increasingly redundant. they have always existed within the context of process. as nothing exists in a vacuum all these activities overlap, the street becomes a film, becomes a sculpture, becomes a sound. modes and maps are transposed and overlaid continually. meaning and

the principal of transmutability of matter is basic to beuys's theory of sculpture: what is desired is a warm, soft state of potentiality. everything is in motion, and the primordial matter proceeds cyclically from chaos to form. movement itself is of paramount significance. this matched in the empirical world by the transmission of

lawrence weiner
displacements
dra
1991
bartomeu mar
in the stream
winn
1995

drawing and memory and philosophy and composition and form and framing and text and dreaming and mathematics and movement
is form is framing is dreaming is mathematics is movement is seeing is typography is photography is poetry is choreography is sound is

interpretation are in a constant state of flux. for those of us at tomato, defining the process, in any medium, fixes the individual or collective moment and uses that medium to frame a set of current approaches and responses. this has allowed us to move freely and simultaneously between media and inter-relate different forms of expression by displacing the methods of one medium with that of another. we notate our experience in order to give form to our thinking whilst recognising that the act of thinking is a sculptural process. this in turn creates work that is a model of this process. for me the most recent examples of this ongoing discourse have been a series of philosophical notations (of which '&/is' is one) and drawings of the sea.

electrical impulses from sender to receiver, which also becomes a metaphor for spiritual communication and the constant restless movement of the mind. beuys's work strategy was a movement between dichotomies. he divided things into opposites and established a flow of energy between them. mutually dependent, no longer in opposition but part of an inextinguishable, life-giving circularity.

bernice rose
joseph beuys
and the language of drawing
thinking is form
the drawings of joseph beuys
p. 84

Part of this (r)evolution of thought is rooted in John's theory of "interconnectivity". Personal experiences and encounters have greatly impacted on his way of thinking and informed his working method. Many of the pathways John has crossed are easily identifiable as intersecting coordinates on a personal map. For example, John's early walks in the country with his mathematician grandfather, provided the essential foundation for observing the world around him and the nature of "relative values" (sometimes literally). Coupled with a chance dinner at age sixteen with the Nobel Prize Physicist Frijo Capra, John was encouraged to develop his interest in scientific equations. More recently, a meeting with the American "Beat" painter and film maker, Alfred Leslie, which had been arranged by a mutual friend, rekindled his attention in simulation, narrative structures and the idea of time-based mediums.

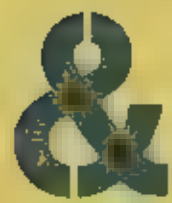
Leslie, along with Jack Kerouac and the American photographer Robert Frank were responsible for the classic Beat film Pull My Daisy (1959). Perhaps one of the best "authentic" documents of the Beat counterculture, Pull My Daisy casts actors as well as original Beat members in a perfect simulation of a home movie. The film was carefully scripted but built upon the Beats' philosophy of "seemingly spontaneous action"³ – a method which John has readily assimilated into his own working practices.

&/is locates a name/object/event within both the universal and specific simultaneously, and locates the experience within an everchanging context. it is both process, and the process of process. between the interplay of the specific sign (&) and the specific name (s) the line (/) is the unnameable and the unquantifiable, it is scaleless, and timeless.

and over is (&/s), is about the relationship between object and objects- the link between the model and the serial - the familial world of the original and the copy - the singular and the multiple - the idea that the relationship to the model can never be the same after the serial reproduction has made its presence felt in the conscious mind - the sense that the original resides in some other dimension to that of the copy - an algebra for the relationships between things and their meanings - algebraic relationships of symbols and word - images are given meaning only in the context of their algebraic function - that is when &/is stands between the twin representations of work(mode)

the condition is unnameable.
there would have to be as many
names as there are conditions

Kerry Brougher
Humble Equations
Scale & Measure
995



as

and seeing and typography and photography and poetry and choreography and sound and architecture and film and sculpture and
architecture is film is sculpture is discourse is writing is painting is music is walking is drawing is memory is philosophy is composition



and the reproduction of the serial elements of a series - &/is implies that being, while described in the present tense as "is", affects, substantiates, factors and divides the conjunctive nature of formal physical and conceptual relationships as "and" - &/is collapses the meaning of the two words taken individually, into a set of meanings that are not completely "is" or completely "and" - there is space somewhere between "and" and "is" where the relationship between descriptors and described resides - the model describes the series - and the understanding of the model is, in most cases formed by the understanding of the series - most people do not have access to the model but are bombarded by the series - therefore the idea of art as an original expression of work in the world

is meaningless for most because the access to the idea of the art is only through the reproduction of the model and not the model itself, therefore the majority of people do not experience art but instead experience representations of art - evidentia digital or photographic reworkings of images which are somehow redolent of original work because we believe them to be so - the reproduction is then the sacrament of our collective faith in the idea of art - reproduction is both the means of transmission and the means of legitimisation of the idea of art - &/is subverts and explains the relationship between things - &/is offers neither conjunction nor equivalence - &/is transforms the understanding of the world of things, their taxonomies and the meaningfulness of art.

a/b, a being the exhibition, b being the possibilities, the ratio a/b is in no way given by a number c ($a/b=c$) but by the sign (/) which separates a and b; as soon as a and b are known they become new units and lose their numerical relative value, (or in duration); what remains is the sign (/)

marcel duchamp
algebraic comparison
the green box
p.26

discourse and writing and paint and music and walking and drawing and memory and philosophy and composition and form and
is form is framing is dreaming is mathematics is movement is seeing is typography is photography is poetry is choreography is sound is

which separated them (sign of accordance or rather of
...?.....look for it.)

what duchamp fails to mention, however, is the line (/) also holds these two exclusive and excluding states together in a dynamic inter-relationship - it identifies the process of process but does not limit it. i believe that this relativist model can be expanded to demonstrate the process of ideas and provide an understanding of the cultural complex that this process inhabits.

if we take the solar system as our model, ideas are like the planets - their mass is directly related to relevance at a certain point in time, as this relevance grows so does its





His latest project with Albert Watson, 'Road Kill', is what John describes as "an 800 page collaborative gesture". The resulting product is intended to be a document of creative process, executed in a moment. The Beat reference is all too clear. Kerouac himself coined the term *happ* prosody in 1951 to describe a process of writing spontaneously. John is clearly an observer. Much of his work depends on the expressive moment.

Productive as this working practice might seem for John, the question has to be asked if this process leads inevitably to stylistic repetition. Much of his work embraces the *kraftvolkswerk* of the photocopy and fax machines along with "designed" offcuts found on the studio floor. Is it all too easy to reach back into the same 'ole bag of tricks' without moving the ideas or visual language along? John doesn't think so. His philosophical strength is drawn in part from the people he has met along his journey as an artist and designer. He equates the process with the collision of meteorites which can dramatically shift the planetary pathways. Often, it is the 'intervention' which produces the more interesting results.

Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be.

Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, 1936

influence (gravity) on its neighbours. the 'weaker' ideas will be brought into its sphere of influence and will either orbit or burn up. others will be attracted slightly and have their orbits altered, but not significantly. no matter how large or small, strong or weak everything has an effect on everything else. just as there are many different physical forms and different forms of physics in the universe so there are different philosophical and cultural forms within this complex the only constant is that there is a continual transference of energy taking place and this is the process of process.

just as edward lorenz 'discovered' that a butterfly flapping its wings in china would effect the weather patterns in new york so every little event in any micro-culture, such as this magazine, can influence other cultures no matter what the size. any number of cultures can exist at any time in any place. conceptual and cultural space is folded and folded again. what was once a linear evolution from past, to the present, to future, is held simultaneously and

Science has proven that "nothing is fixed" and that everything is going through a continual process of change. A "do-it-yourself" circular, corporate logo, or newspaper, however, reaches a momentary pause in its journey. This may be at the point of transmitting information to a reader or perhaps the pause which occurs physically in its form as a printed object. Of course the journey of the graphic object continues when the paper deteriorates, digital information is altered, or we transform the meaning by changing the object's context. But it is still the mapping of the object's movements and their contextual meanings which John is keen to explore.

as

framing and text and dreaming and mathematics and movement and seeing and typography and photography and poetry and architecture is film is sculpture is discourse is writing is painting is music is walking is drawing is memory is philosophy is composition

contemporaneously in the complexity of a perpetual now any one process reveals and informs all other processes including both the process of experience and the process of seeing

perhaps it is to do with those early talks with my grandfather but for me the sea embodies many of these issues. i became fascinated more by its physical properties, its spatial complexity, millions upon millions of events constantly changing form, mass and direction, rather than the effect of the light upon the waves. these are not frozen moments of time, but as drawings taking place within time they record the fluidity of mass, form and sound and its resultant spatial and temporal complexity.



Maps themselves constitute their own history. They construct, but do not reproduce the world⁴. This is evident in John's meticulously produced sea drawings which are interpretations of the transformation of the sea. Not content with merely "looking", these drawings force John to "see" what is going on around him. A distinction worth noting. The drawings are also intentionally difficult to reproduce in print. This highlights John's constant questioning of and fascination with, the art of mechanical reproduction and theoretical notions of simulation.

the sea is the sea and it has its form, the drawing of the sea is a drawing of the sea and it too has its form, and the reproduction of the drawing of the sea is the reproduction of the drawing of the sea and this has its own distinct form, each, in turn, inform and deny the other. because of what they omit or include the drawings and the reproduction of the drawings are inherently unstable as they attempt to name the unnameable

it took me a while but i became fascinated with television (perceived as) a sculptural object. like the sea millions upon millions of events change form and direction at every moment but has little or no mass or sonic qualities. the complexity is entirely planar. a figure remains in the centre of the screen even though we are tracking him through the street, zooming gradually towards him. the more i see television in this way the more surreal the experience becomes.

the drawings of this activity, like those of the sea, are

should we believe the photograph represents the 'objective truth' while the painting records the artist's subjective vision- the way he transformed 'what he saw'?...take the image on the artist's retina. it sounds scientific enough, but actually there never was one such image which we could single out for comparison with either photograph or painting.

professor ernst gombrich truth and the stereotype referring to cézanne's paintings of mont saint-victoire and photographs of the mountain taken from the same vantage point

[Screen idols] embody one single passion only: the passion for images, and the immanence of desire in the image. They are not something to dream about; they are the dream.

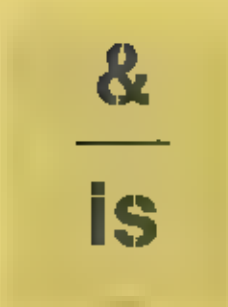
Jean Baudrillard, *America*, 1988.

choreography and sound and architecture and film and sculpture and discourse and writing and paint and music and walking and is form is framing is dreaming is mathematics is movement is seeing is typography is photography is poetry is choreography is sound is

composed of thousands of extremely light gestural marks that (attempt to) follow the fluidity of form and direction, the content is irrelevant as programme follows advertisements which follows film follows programme.

in both the sea and television drawings, drawing the same thing over and over again or drawing drawing upon drawing locates the object and the act itself within the philosophical and cultural complex which in turn informs both object and act - an example, once again, of the process of process.

this is echoed in the photography of hiroshi sugimoto. in the series theaters he sits in an empty auditorium, his



His well-considered proposal for models which effectively attempt to explain and visually demonstrate ideas equally embody his penchant for mathematics and expressive forms. The &/is model, for example, is nothing more than an equation for long-hand division. By substituting the conventional numerical figures with words and symbols new signs are created. The ampersand represents the word 'and' removing it from the literary realm and into the symbolic. However, 'is' remains in its original literary form as representing 'being'. The division line also becomes a sign as an established formal design convention. The line is used to denote hierarchy and to establish a division or a physical barrier between ideas.

In the long run, John does not rely on a simple transformation of literary interpretation. In his application of a semiotic communication model, John (re)presents an additional layer of information in the selection of typographic forms. His choice of stencils establishes an immediacy of action while also demonstrating a pre-determined and controlled chaos. It is cut to fit its purpose. And, as a communication form, the act of stencilling is fundamental to the visual language of British anarchical traditions.

The Pistols are helping kids to think. That's why everybody's scared, because there's some kids that are actually thinking. The Pistols reflect life as it is....not some fantasy world...

Mark P., Sniffin' Glue, 1977.

camera aimed squarely at the screen and exposes the entire length of movie onto a single frame. the movie screen is now a glowing rectangle of white light, the accumulative exposure obliterating the stream of images.

for me these images challenge the physical, conceptual and cultural context of photography. they set a tension between photography's intrinsic role as a documentary medium and modern painting's role as indicator of the sublime through pure form, as much as sugimoto's photographs are philosophical propositions about aspects of the subject the drawings of both the sea and television are about the material of the subject, the material of drawing, and the material of reproduction.

by superimposing models from all these contexts work is made, it is the process of transmutability

thinking and form. thinking as form.
thinking is form.

light assumes the pace of a story whatever its title, and of the arbitrary, constantly shifting positions of the camera not only are individual films transitory: the film medium itself, photography's great rival, seems to have lost its capacity to survive

thomas kelblin
hiroshi sugimoto
time exposed
p13
thames and hudson
1995

the process of change seems to be continuous, and continually seems to be the primary context of infinity. the continuous is what is infinitely divisible.

aristotle
the physics
book II: 200b16

as

drawing and memory and philosophy and composition and form and framing and text and dreaming and mathematics and movement
architecture is film is sculpture is discourse is writing is painting is music is walking is drawing is memory is philosophy is composition

John Warwicker is working outside of the conventional design world. After all he is a product of late 1970s British art school training. As a young student he was offered a place at both Cambridge and Oxford Universities. But in one of his more decisive moments, instead accepted a place at Camberwell Art College in London. In his words, "The girls were better looking in art school." It is at this point we may witness the apropos fate of John's notion of chance meetings. Through a classmate Steve Walsh, co-editor of Sniffin' Glue he met Britain's punk impresario Malcolm McLaren. Recently, John has crossed paths with McLaren again. This time in a professional context, John will be designing McLaren's forthcoming book. Although he considers himself somewhat outside the hardcore punk scene, John was an 'active' observer of British subcultural activity, Situationist manifestos and political uprisings. There is no question in my mind that his work today is the result of these early influences. He has been on the road, hit the offramp and made a few detours concerning his personal and professional life, but always managed to find his way. The journey has put him in good stead with the British design community.

But Casablanca is...the city the setting for a Passage, the passage to the Promised Land. But to make that passage one must submit to a test, the Wait [and see].

Umberto Eco.
Casablanca, or the clichés are having a ball, 1977

But just like Kerouac, John is reaching a point in his career where he may just become a 'mythic hero' in the design world at least. He, and Tomato, have achieved a prominent place in the British design community along with a handful of other 'thinking' designers which include Jonathan Barnbrook and David Crow. By establishing a philosophical approach and visual aesthetic through an exploration of 'personal content', John has deliberately generated debate amongst designers and critics. Despite this however, it will be the unique mapping of his journeys which will keep his work new and fresh, and allow him to survive within a commercial context.

¹ Watson, Steven. The Birth of the Beat Generation: Visionaries, Rebels, and Hipsters, 1944-1960, New York: Pantheon Books, 1995. p.5.

As the afternoon moved on in the Rose Garden and our table filled with empty tea cups, I sensed that our discussion was drawing to a close. John had spoken earlier of Tomato's flexibility to shift directions as a company structure depending on personal interests and projects. The company is responsive to the individual. John is currently re-evaluating his own direction. I had only one question left. Who would John meet at the next crossroads?

² One of many alternative titles considered for Jack Kerouac's book On the Road. Some of the others included American Road Night, Home and the Road, Along the Wild Road, and Boy on the Road.

³ Watson, Steven. p. 282.

⁴ Wood, Denis. The Power of Maps. London: Guildford Press, 1992. p.113.

tomato was formed in 1991 by steve baker, dirk van dooren, karl hyde, rick smith, simon taylor, john warwicker and graham wood. gregory rood joined in 1992 and left in 1996. jason kedgley joined in 1994. dylan kendle joined in 1995 and left in 1996. michael horsham joined in 1996.

recent clients include, channel 4, nike, adidas, reebok, the institute of contemporary art, levi's, mtv, philips, the spanish government, the bbc, thomson electronic, coca cola, pepsi the guardian newspaper, sony and hutchison telecom.

in november thames and hudson will publish 'process; a tomato project' ~ a visual primer to the nature of discourse and exploration.

tomato's work has been published in many different books and magazines across the world.

and seeing and typography and photography and poetry and choreography and sound and architecture and film and sculpture and
is form is framing is dreaming is mathematics is movement is seeing is typography is photography is poetry is choreography is sound is

Teal Triggs is co-founder of the Women's Design Research Unit (WD•RU) and Course Director of the MA Typo/graphic Studies at the London College of Printing and Distributive Trades. She is editor of the student reader Communicating Design: Essays in Visual Communication (B.T. Batsford, 1995) and a frequent contributor to various international design publications.

as discourse and writing and paint and music and walking and drawing and memory and philosophy and composition and form and
architecture is film is sculpture is discourse is writing is painting is music is walking is drawing is memory is philosophy is composition

inthisworldtogether

framing and text and dreaming and mathematics and movement and seeing and typography and photography and poetry and
is form is framing is dreaming is mathematics is movement is seeing is typography is photography is poetry is choreography is sound is

And the Beat Goes On.....



three-dimensional rendering of my body, inscribed with typography. In designing VR, considerations of the body are more direct, necessary, unavoidable. It led me to consider again, to gnaw on the possible relationships among design, bodies, and technology.

Unfraying Strands of Mind and Body

Perhaps the most notable aspect of VR is the consciousness-altering bodily experience, generally and problematically termed "disembodiment." The experience of disembodiment results, in part, from the multiple and often conflicting input the user receives. On one hand, the user feels immersed in the stereoscopic, three-dimensional simulation, where s/he can experience extensions of the body not ordinarily available in the real world, like flying as a bird might. On the other hand, the user's body is undeniably bound by the physical world, by gravity. Thus, the user receives two feeds, two sets of input: of flying and of being bound by gravity. Often, this results in sim-sickness (simulation

Recombinant Bodies

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Gromala

9. Placeholder was developed by Brenda Laurel and Rachel Strickland at the Banff Centre, with additional support from Interval Research

10. Osmose was developed by a team (John Harrison, programming; Georges Moura, graphics; Dorota Blaszcak, sound design; Ric Bidlack, music) at SoftImage, led by Char Davies, Director of Visual Research.

<http://207.68.137.9:80/softimage/frameless/News/Events/Osmose/osfront.htm>

sickness), but often, the body adapts or habituates, reconciling these dual feeds.

The term disembodiment also refers to the ways in which VR interfaces can alter the user's perceptions. For example, in Placeholder⁹, if a user chooses the avatar (a representation of herself in the simulation) of Snake, that user's perceptions will change to that of anthropomorphized "infrared" vision, with movements limited to the ground. Similarly, if the user chooses the Crow avatar, he is able to fly, and his voice is synthesized to be somewhat "crow-like." Other interfaces, like that in Osmose,¹⁰ rely on utilizing the user's breath and balance for navigation, an interface inspired by scuba diving. Experiences in these VR worlds can be profound, defying easy description. Therefore, it is little wonder that they are likened to drug-induced states, or to disembodiment.

But the term "disembodiment" reveals the difficulty of describing these sensations, and reveals our culturally biased reliance on thinking about the mind and body as somehow separate entities. Discourses surrounding VR, as well as science fiction, often refer to the desire to "download consciousness," leaving the problematic meat behind. This reliance of thinking in terms of mind/body, attributed to René Descartes, is increasingly being called into question, to a large degree, by the effects of technology.

The creation of immersive virtual worlds requires that the body is directly taken into account, and shifts the focus of design to the behavioral realm. Interaction and navigational strategies immediately implicate perceptions of vision, hearing (sound can be located in space), touch (haptic),

Batworld

Recombinant Bodies

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Gromala



A work-in-progress, **BatWorld** is a minimal-visuals VR piece, in which users' visuals are decreased over time until they must rely on their hearing. Three-dimensional spatialized sound, echos and reflection of sound become the prime navigation devices. As "bats," the users begin by hanging upside-down in the cave, listening to verbal stories of bats in Slavic myth. Here, the sense of being upside-down relies on vision. However, the visuals become increasingly dim. At this point, users are forced to leave the cave and fly. Flying, they may catch insects in order to eat, and to avoid the predator owl and stationary objects.

This work was inspired by Mia Lipner, who is blind and therefore unable to participate in most VR work. I was challenged to design a VR world that did not rely on visuals, forcing me to radically rethink how I perceive and navigate in space and thus, how I can design the world for others. Curious bodily effects ensued: the more familiar I became with depending solely on my sense of hearing, the more I noticed temperature and skin response to sound and to perceived stationary objects, which reflect sound shadows.

Created by Diana Gromala, in collaboration with sonic goddess Mia Lipner, and computer scientists Ari Hollander and Chris Shaw.



and proprioception (the sense one has of being in one's body). The designer creates a three-dimensional world of complex if-then scenarios; if the user approaches a flock of simulated geese suddenly, the geese could fly away in a flock, whereas if the user approaches the flock slowly, the geese could cautiously walk forward, looking to the user as if for food. The virtual world itself may contain elements or characters that thus behave in certain ways, responding to one or several users, and may bear characteristics, like diffuse fog or breakable glass, solid or transparent.

Referring to "the designer" of a virtual world, however, is generally a misnomer. The complexity of creating VR necessitates extraordinary technological expertise, and requires the collaboration of artists/designers and computer scientists (who also refer to themselves as designers), among a host of others. Because VR is an emerging medium, and because it demands diverse skills, the division of labor is always messy and sometimes in conflict. A designer, like an artist, brings the skills of understanding the visual language of representation, and to some degree, behavior related to visual understanding. Where designers excel, it seems, is where directed behavior or navigation in VR is required, where communication needs to be unambiguous, and where the organization of complex

11. By "our," I refer to the standpoint of the relative privilege of American graphic designers. By "postmodern," I do not simply refer to visual styles, but more broadly, to the forces which lead to visual stylistic manifestations. As described by Fredric Jameson, postmodernism is "...a new social and economic moment (or even system), which has been variously called media society, the 'society of the spectacle' (Guy Debord), consumer society ..., or postindustrial society (Daniel Bell)."

Fredric Jameson, in his introduction to Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge*, Minneapolis: University of Minnesota Press, 1988, p.vii.

12. A very partial list includes: Marshall McLuhan and Harold Innis; Jean Baudrillard, Donna Haraway, N. Katherine Hayles, Jean-François Lyotard, Fredric Jameson, Paul Robins, Sherry Turkle, and Paul Virilio.

information is necessary. Of course, the distinction between designer and artist in this case is unproductive and moot, for what both groups require for creating VR is an increased technical knowledge so they may effectively communicate with computer scientists at a crucial time in VR development, and so they can exploit or creatively use the specific qualities this medium has to offer. But this is one additional necessary skill. Others include knowledge of space, perception, behavior, and bodies. For what the creators of VR offer us most particularly is work that profoundly affects our senses, our bodies.

Strands of Bodies, Symbolic and Material

VR is only one of many technologies that influence our highly technologically mediated postmodern cultural context.¹¹ Recent discourses concerning technology – from television and telecommunications to the Internet and biotechnologies – point toward the ways in which it profoundly influences and disrupts our notions of mind and body, human and machine, nature and culture, "real" and virtual worlds. Theorists describe the ways in which technology fundamentally changes our conception and perception of time and space, allows users to engage multiple and unexplored aspects of the self, and creates a profound shift in the way we understand and experience self, body, and technology.¹² The dominance of technology creates a new social order, "one which no longer constructs subjects within the



time and space coordinates of industrial architectures, but instead within the information networks of electronic architectures.”¹³ These information architectures are rife with refigured symbolic, often visual realms, necessarily implicating design.

This technologically mediated, postmodern context is characterized by the “hyperreal.”¹⁴ In the hyperreal, signs no longer maintain a referent – that is, signs no longer refer to anything “real” – or are preferred over the thing they originally represented. This is perhaps best illustrated by a sort of allegory of the hyperreal, written by Jorge Luis Borges. In *Map and Territory*, the cartographers of the Empire created a map so precise that it covered the exact territory it represented. People confused the map with the actual territory, which changed forever their understanding of the real, even after the map had disintegrated. This story is often compared to the simulated realities that comprise our culture, saturated as it is with graphic design, television, computer networks, ATM machines, satellites, medical imaging, and so on. Meaning in this symbolic realm is unstable, contingent, shifting – design works (signs, if you will) become “texts out of context”¹⁵, one instance of many that comprise hyperreal simulations. Here, represented bodies mean and mean again, but how does the

Recombinant Bodies

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Gromala

13. Jon McKenzie, VIRTUAL REALITY: PERFORMANCE, IMMERSION, AND THE THAW, in *The Drama Review* 38, 4 (T144), Winter 1994. New York University and the Massachusetts Institute of Technology p 97.

14. Jean Baudrillard, *Simulations*, New York: Semiotext(e), 1988

15. N. Katherine Hayles, TEXT OUT OF CONTEXT: SITUATING POSTMODERNISM WITHIN AN INFORMATION SOCIETY, in *Discourse* 9, p.26

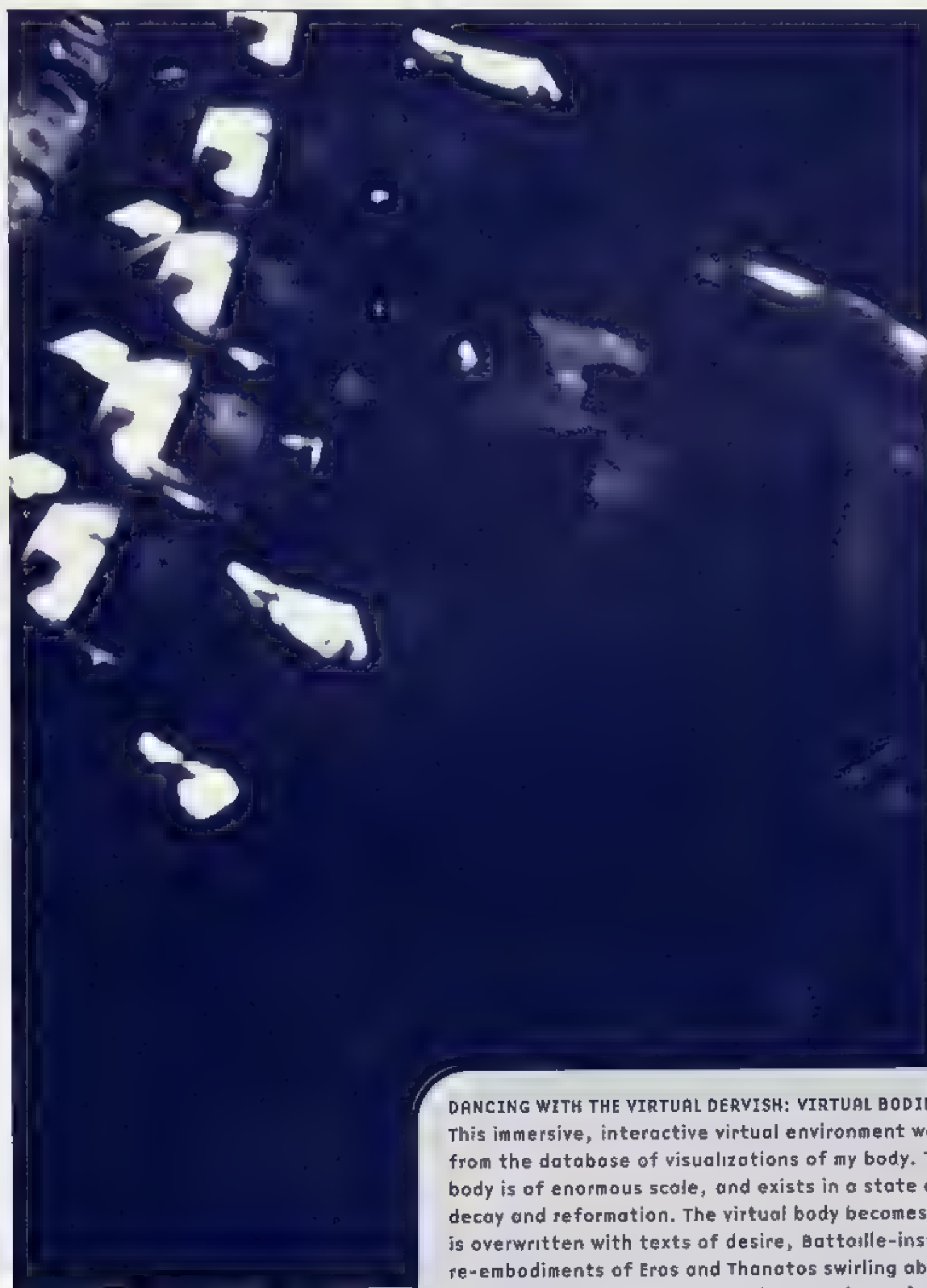
16. Mary Douglas, *Natural Symbols: Explorations in Cosmology*, New York: Pantheon Books, 1970; rev. ed. 1982, p. 65.

hyperreal, symbolic realm relate to physical, material bodies?

We may be familiar with discourses relating to a media culture, which designers help create, maintain, and on occasion, disrupt. It is commonplace to understand how violence on television, or the images we create of bodies, particularly of women’s bodies, may affect our culture in indirect but potent ways. But the implications for our involvement as designers extend beyond mere representation in the symbolic realm of typography and images, to the material realm, the materiality of bodies.

According to the anthropologist Mary Douglas, “*The social body constrains the way the physical body is perceived. The physical experience of the body, always modified by the social categories through which it is known, sustains a particular view of society. There is a continual exchange of meanings between the two kinds of bodily experience so that each reinforces the categories of the other.*”¹⁶ Douglas drew upon the work of Marcel Mauss, among others, to examine the relationship between the biological and socially constructed symbolic realms, in order to understand the way bodies are culturally constructed, regulated, and understood, and to look at the ways in which the social subject and physical body co-constitute each other. Their work demonstrated that what we consider “natural” or what operates at the level of “common sense” is the result of specific cultural biases and assumptions, and are not as natural as they may seem at first. Thus, one cannot simply split the conception of bodies and their symbolic representations from their material fact as somehow mutually exclusive – both influence each other.

Dervish



Recombinant Bodies

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Gromola

DANCING WITH THE VIRTUAL DERVISH: VIRTUAL BODIES

This immersive, interactive virtual environment was constructed from the database of visualizations of my body. This virtual body is of enormous scale, and exists in a state of constant decay and reformation. The virtual body becomes "book" as it is overwritten with texts of desire, Bataille-inspired re-embodiments of Eros and Thanatos swirling about splintered and reconfigured forms, textual encryptions of a body in pain, a body in confluence with materiality, the immaterial, and dematerialized notions of corporeal transcendence, of corporeal reinhabitation.

Created by designer Diana Gromala, and choreographer Yacov Sharir, with a team of computer scientists: Chris Shaw, John Harrison, Graham Lindgren, and Glenn Frasier.



Technology further problematizes bodies in the material and symbolic realms. As Sherry Turkle puts it, there is an on-going permeability between the material world, or RL (real life), and the symbolic virtual world,¹⁷ and bodies are implicated in both, as is technology. Technology allows for the creation of symbolic realms, it influences the way we develop and use language (including visual languages), it influences the very ways in which we perceive, and it radically influences the physical realm. Yet the notion of technology as essentially distinct from humans and nature is itself problematic: where does one draw the line between what is and what is not technology? Is a hammer technology? Is language itself a technology? Further, by maintaining technology as an essentialized, deterministic Other – as somehow out of our control, with a mind and force of its own – we can easily disavow our responsibilities in how it is developed, used, and understood. Our bodies, just like Borges's map, relate and are influenced by both the material world and symbolic world, worlds confused by technology.

Recombinant Bodies

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Gromala

17. Turkle does not directly refer to the virtual world as inclusive of the hyperreal. Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet*, New York: Simon & Schuster, 1995.

Multi-tasking Multi-bodies

I have a number of students who regularly, though usually unwittingly, point out how strange our technologically mediated world can be. One clicks on the university's website – which has a video camera pointed on the main square of campus – to see if it is raining, rather than craning his neck to look out of the window. Another, who admittedly is addicted to Nintendo games, tends to jump ever so slightly as he rounds corners of buildings. His body was conditioned by Nintendo games, where aggressive foes tend to lurk around corners. Like Borges's map and territory, his body responds to both RL and the symbolic world of computer games, confusing the two.

My students are quick to ferret out technological X-Files, quick to switch genders in their on-line communications, quick to devise ways to "trip" in VR. One student has two distinct personalities – one on-line and one in RL – that she has sustained for more than five years. On a televised talk show, she says, she'd have to appear as someone who suffers from a multiple personality disorder. On-line, she says, she is normal, expressing differing facets of her personality in a healthy way. When one student found out that he was actually talking on-line to a BOT (a preprogrammed character who operates autonomously from any user), he didn't care, and kept at it. The BOT, it seemed, was a lot more interesting than many of the humans. A blind student, wickedly funny and tired of not being able to



1 participate in VR because of its emphasis on the visual, is designing a Batworld, where users navigate by
2 sound. They have to find insects to eat, and need to avoid the predatorial owl. Not fully satisfied with a
3 singular owl, she is wondering how she will add the "unholy army of death" that she always yearned for
4 as a child. Her on-line avatars include her seeing eye dog.

5 Yet my students are suspicious of technology, cynical but curious. It is claimed that if
6 or when nanotechnology becomes a reality, microscopic robots could some day live within a human body,
7 repairing damaged DNA on the fly to prevent cancer or repair damaged tissue. Instead of the users'
8 perceptions being influenced by technologies perceived through the senses of their bodies, they could also
9 have those senses altered by a technology from within their bodies. My students wonder how that is any
10 different from pacemakers and drugs – a mechanical form of Prozac? they ask. Similarly, if
11 nanotechnology becomes viable, it wouldn't be unlike asking the computer in Star Trek to fabricate a
12 meal, a tool, a book. Here, the distance between symbolic computer code and material manifestations
13 becomes very small indeed. Does a designer have any role in that sort of scenario, in technology of that
14 magnitude?

Recombinant Bodies

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Gromala

Diana Gromala directs
the New Media
Research Lab at the
University of
Washington in
Seattle, where she
teaches courses
in interface design
and virtual media.
Her VR work has been
exhibited and
performed in the US,
Canada, and the
Middle East, and has
aired on the
Discovery Channel



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Punctuation, or the Dream of Legibility

From Vision to Substance

By Frances Butler

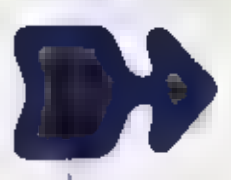
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1 We write not to be understood
 2 but to understand.
 3 We once spoke to understand;
 4 meaning was generated through dialogue.
 5 Now we hardly talk
 6 and we don't read;
 7 we look.
 8 If we have the patience,
 9 we still write to understand.
 10 Formerly,
 11 we read out loud what we wrote,
 12 now we write for the silent viewer
 13 and punctuation,
 14 or the spatial organization of the page,
 15 has invaded the page
 16 until it has become

information.

Punctuation, or the Dream of Legibility

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7

Butler

17 The development of punctuation,
 18 or the structure of two-dimensional reading –
 19 from the sentence in a book
 20 to the sign in a city –
 21 is the story of belief in the efficiency of
 22 controlling the location of thought,
 23 of paring the options to the visible.

24
 25 Studies in cognitive psychology and
 26 anthropology demonstrate
 27 that the nature of information gathering
 28 has always been organizational,
 29 nothing more.
 30 In preliterate culture,
 31 however,
 32 there were many different opportunities
 33 for conceptualization
 34 using the full range
 35 of sensory capabilities:
 36 sound,
 37 touch,
 38 as well as sight.

From the time of the Greeks and Romans to the fifteenth century, most cultures were oral, and when writing was used, it was used as an aid for those reproducing speech for listeners, not readers. Even those who were literate read out loud, and it was only in the fifteenth century that reading became silent, and punctuation served to indicate unformed sounds, unspoken emphases.

— New Demotic Typography: The Search for New Indices

Designers, when preparing texts and images for publication, tend to be preoccupied with the conventions of organization and the perceptual habits underlying compositional understanding. Ideas of legibility change, but at any period the graphic designer has believed that ideas and images need framing in a visible or syntactic structure.

— The Intended Perception and the Perceived Intention

Many scholars
have by now investigated
how the shape of writing
became the shape of thinking.
But the literate system
described by Marshall McLuhan, Walter Ong or
Frances Yates,
in which words held meaning
and were placed in spatial organization
so that shape equaled meaning,
has now given way.
Electronic media,
especially the *ad hoc* aspects of television
and cinema,
have opened access to knowledge to
everyone, not just to the literate.
And as the scale of knowledge has expanded,
so has our understanding of its nature.

Punctuation, or the Dream of Legibility

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Now our understanding
of the multiple modes of human intelligence
makes room for the importance
of the non-selective sensory scan
in human cognition.
Acknowledgment of the multiplicity
of cognitive options
has supported the development
of hybrid art forms
over the last quarter-century,
especially performance art
and the artist's book.
These art forms use not only language
and image and time and space,
but all their gradient forms of
texture,
substance,
structure,
and
physical handling.

Visual experience parallels, both theoretically and actually, the actions and responses inherent in the rhythmic structure of dancing and the freely outlined elements of play. Whether the physical experience is that of the eye moving around a page, the hand turning the pages of a book, or the body traveling through a reading environment, time and movement are critical elements in comprehension and in the perceived significance of a text.

— Dance and Play in Visual Design

Some of these artists
 rejoice over the change in scale
 of the relevant field for their art:
 Laurie Anderson calls her work a "giant camera movement, a giant pan..."
 Others are confused by the transition:
 Michael Pep says, "Like the identifying features of value in general, those of art have,
 as in a supernova, expanded quickly enough to qualify as an explosion and we are left with a vast,
 indistinct nebula of dust and gas."
 But,
 freed from the tyranny of verbal literacy,
 the truly elegant and economical nature
 of human thought
 is now visible,
 and legibility,
 a dream of thought controlled by spatial order,
 using punctuation,
 is now becoming an indivisible whole.

Punctuation, or the Dream of Legibility

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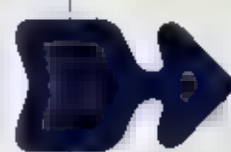
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Butler

What was
 the traditional structure of presenting text?
 It was a history
 of increasing fragmentation,
 eventually reunited by human reading habits.

Just before the invention of movable type,
 text was broken into sentences
 with periods and capital letters,
 broken into paragraphs
 with indentations or extra leading,
 broken into multiple columns,
 broken into chapters
 with initials and a section of *diminuendo*,
 (large to progressively smaller lettering).
 Eventually,
 however,
 the text was reformed
 around the fixed viewpoint
 of the isolated

reader.



In short, it may be that the incomplete story,
 the particle, the fragment, is now the preferred unit of
 information in our culture, and lack of place is more useful
 for presenting these fragments than to fix them into
 regular sentences or grids.

— Reading Outside the Grid: Designers and Society

1 The migration
2 of spatial punctuation
3 in the text
4 to the institutionalization
5 of the "spatialization of consciousness"
6 in literate society
7 was assured by teaching practices
8 that were designed to show schoolboys
9 how to think.
10 Rudolph Agricola (1444-1485)
11 and Petrus Ramus (1515-1572)
12 devised diagrams
13 that identified ideas with visual structure
14 very much like the medieval
15 theater of memory.
16 This pedagogy
17 substituted the memorization of outlines
18 for the act of thinking,
19 and their shapes
20 for the content of thought.

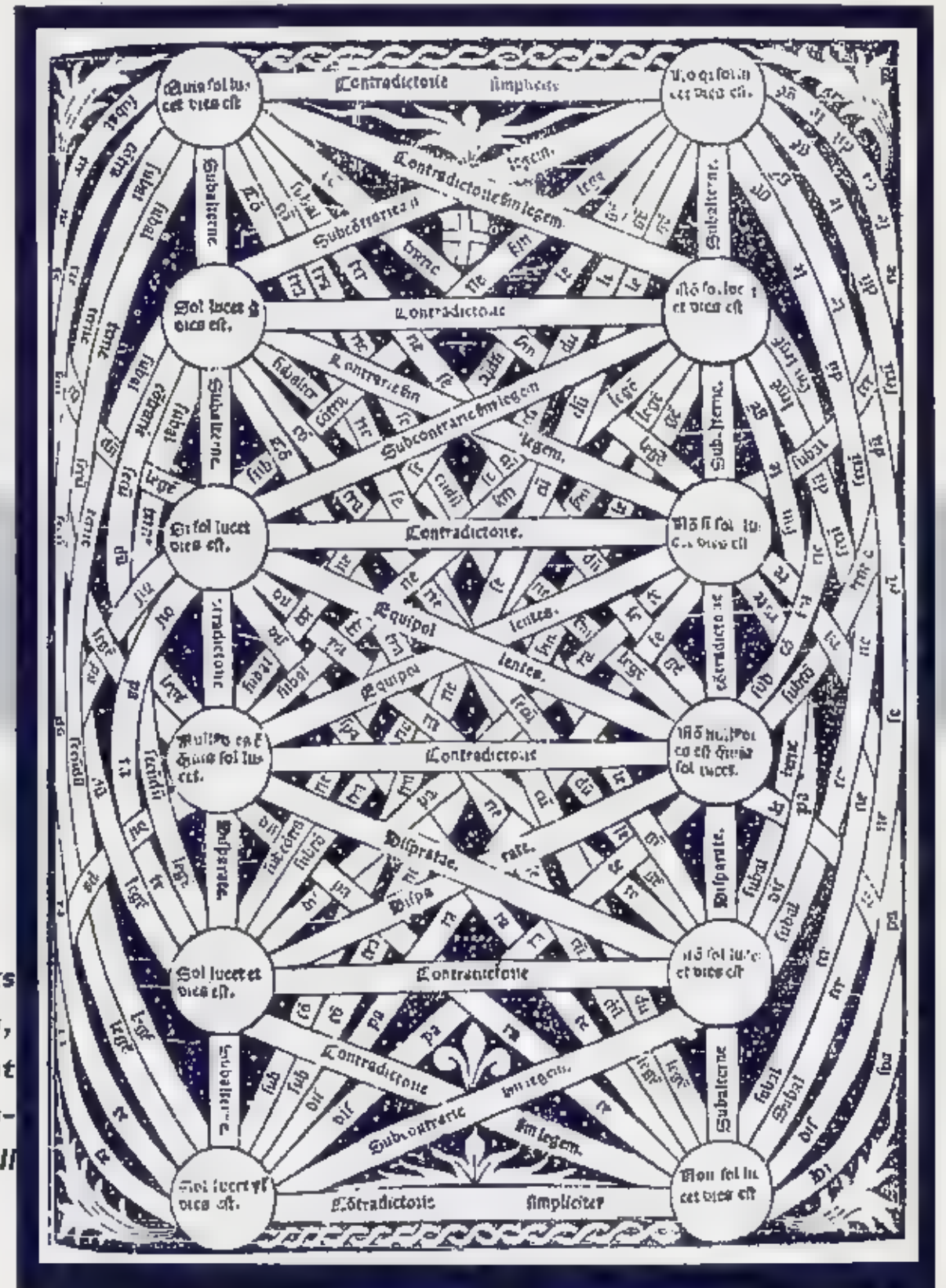
Punctuation, or the Dream of Legibility

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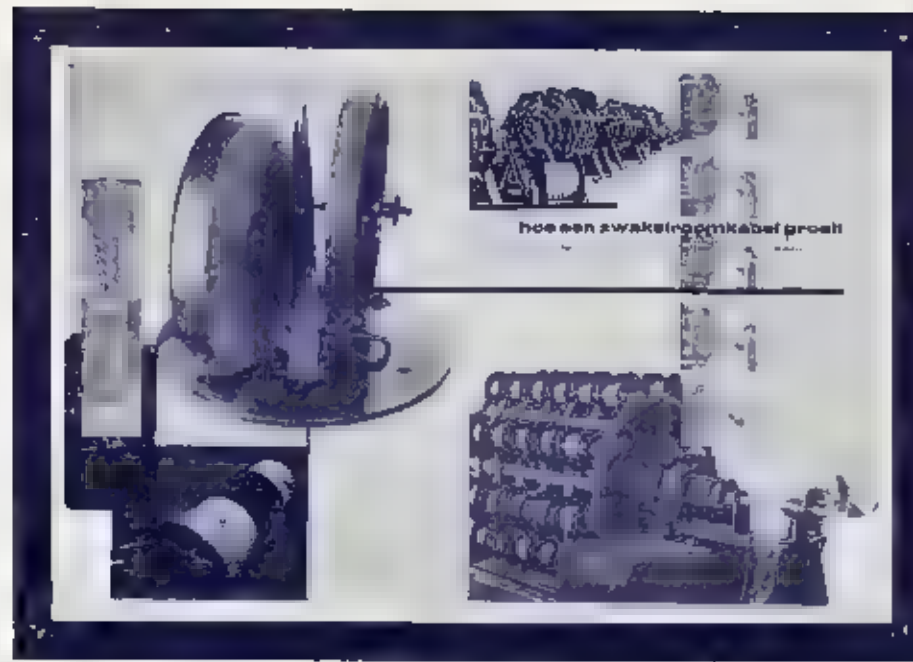
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Butler

21 Walter Ong,
22 the main historian of this process,
23 notes in his book,
24 *Ramus: Method and the Decay of Dialogue*:
25 "The (pre-Renaissance) mind had preferred to think of books
26 as saying something, of sentences as expressing something,
27 and of words and ideas as 'containing' nothing at all but
28 rather as signifying or making signs for something. After Ag-
29 ricola the notion of content can serve for and level out all
30 these diversified modes of conceptualization."
31 1983, 21



Juan de Celaya
The Geometry of the Mind
Mnemonic device
early 16th century



And although the impact of unstructured information in electronic media, film and television has gone far to destroy this system, the equation of punctuation and thought processes is still being made.

Poetry has long used spatial placement as an expressive element.

With the perfection of the conventions called modern typography in the years between 1910 and 1970, spatial control of the page became even more exact.

At first modern typography looked promising; graphic designers like El Lissitzky and Piet Zwart were inspired by the Russian folk print, the *lubok*, and by the beginnings of the cinema, to try to incorporate the non-linear cognitive scan into the two-dimensional page.

TOP
Piet Zwart
Delft Kabels
Brochure design, 1933

BOTTOM
lubok
(woodcut print)
Cat of Kazan's Funeral

Punctuation, or the Dream of Legibility

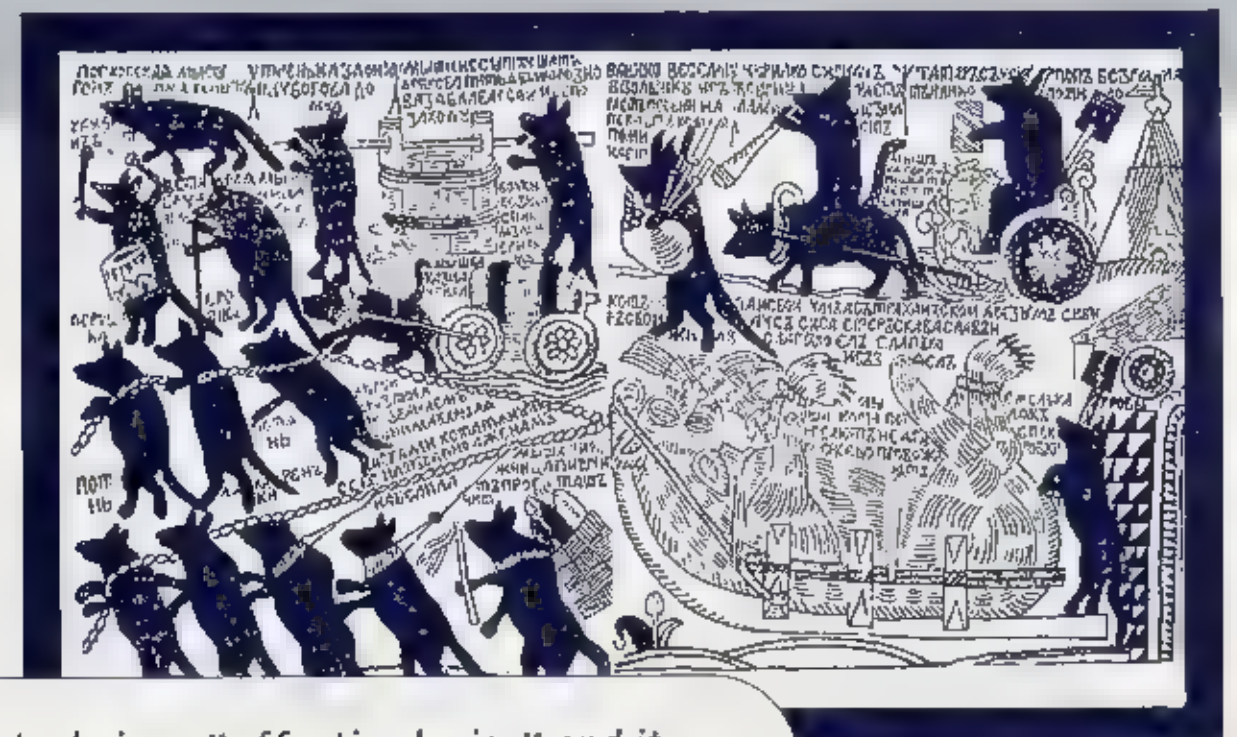
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Butler

The *lubok* worked the way experience in the sensory world worked: bodily experience was registered and understood all at once, so all the elements of the story could be placed around the page where they would fit, not according to literate conventions of time

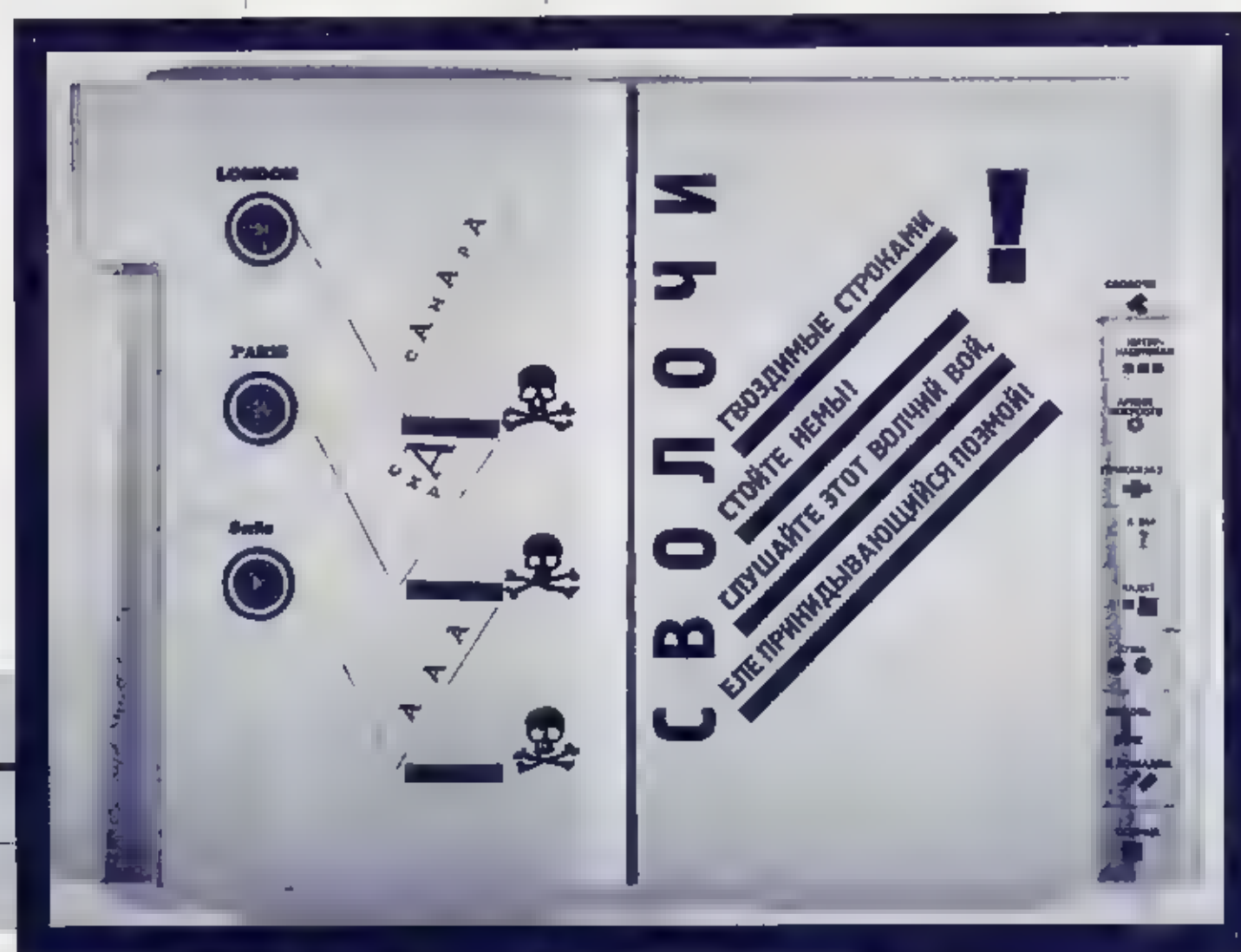
or space.



Eisenstein called this technique "affective logic," and it was central to his film syntax theories. But collage, both opaque and transparent, was only one of the ways in which print designers were affected by the structures through which film represented time. The changing viewpoint and distance of viewing, juxtaposed in the same frame or page, or established in a rhythmic sequence, and the film editing device of directional markers at the edge of the page to imply action, were also incorporated into print. El Lissitzky wrote about *Of Two Squares*: "the action unrolls like a film"; Rodchenko used the sequential frame model for his *Jim Dollar Mess Mend* books; Piet Zwart designed catalogues directing the eye through the pages by use of the edge; and Ladislav Sutnar even worked out the rhythm for reading charts for both catalogues and exhibitions in which he noted placement within the frame, number and repetition of images, and scale of viewing, very much as a cinematographer would.

— Modern Typography

1 Russian Constructivist El Lissitzky's
 2 picture/text
 3 for Mayakovskii's
 4 *For Reading Out Loud*
 5 is an example of the structure of the continual scale used in a book.



Punctuation, or the Dream of Legibility

6 2

Butler

6 Others understood
 7 that the cognitive mode
 8 that made sense of the *lubok*
 9 worked as well in the new silent films.

10 By the 1930s
 11 cinematic experiments had revealed the human capacity
 12 for creating visual connections without recourse to spatial devices or psychological constraints.
 13 The realization that cognition was nothing more than a tension field of questions,
 14 a series of many talking heads all looking at and continually questioning their left and right-hand neighbors,
 15 demonstrated the complete flexibility
 16 of human visual thinking,
 17 wherein whatever "followed"
 18 could be used to "connect."

19 But this human ability
 20 to work with such a profusion of input,
 21 with such an economy of organization
 22 only became recognizable
 23 with the arrival of hand-held film and video cameras
 24 in the middle of the century.

El Lissitzky
For Reading Out Loud
 Book design, 1923

even though the crucial lesson of the legibility of the whole was learned from the *lubok* and the early cinema, the lesson was only fitfully applied. Although there were books that incorporated the pictorial syntax that was the equivalent of film syntax, in general, graphic artists merely produced new spatial ordering systems. Lazlo Moholy-Nagy reused a 17th-century German version of the "theater of memory," sectioning off the page into squares to store their "matter," in his *Bauhaus Bücher #8, Painting, Photography, Film*, and this was copied and rationalized by a long series of European designers into the grid system that provided a framework for spatial control all over the page, not just at the top and the left edges.

Low aerial photograph
over a square with

8
streets opening into it.

TEMPO-o-

The vehicles electric trams, cars, lorries, bicycles, cabs, bus,
cykionette, motor-cycles travel in quick time from the
central point outwards, then all at once they change
direction; they meet at the centre. The centre opens, they
ALL sink deep, deep, deep—

a wireless mast

TEMPO

Under
ground
railway
Cabs
Canals

The cam
era is swi
tch
ing
there
is a sense
of plung
ing down
wards.)

Under the tramways
the sewers being
extended
Light reflected in the
water

The symbols and systems were designed to be learned by memory, not using the active interplay of experience and symbolism typical of the human cognitive system, and being monotonous, they were ignored.

The grid system is an example of tight surface control, in which place has meaning. It is supported by a simple formula, a narrow range of options and continued control of the options through a manual which defines parameters into the future. Since the layout skeleton is so easily recognized, information can be applied to the grid with full confidence that every position on the page can be quickly seen as an information-bearing point. The grid system is still being used by institutions because their communication is usually quantitative, analytical and easily reduced to positives or negatives.

— New Demotic Typography: The Search for New Indices

1 The only community
2 that still finds
3 these artificial emblems useful
4 is the multinational business community,
5 and despite the development
6 of computer programs for page layout
7 based on modern style typography,
8 this is the twilight
9 of the belief
10 in two-dimensional
11 spatial punctuation,
12 which dominated
13 the history of human thought
14 from the days of Petrus Ramus
15 to the 1960s,
16 when Jacques Bertin
17 was writing *Semiologie Graphique*.

We are a culture of committees, in business, in government, and education, and although we make personal decisions, these are either marginal or irrelevant to the main operations of power. There is nothing more important to institutional culture than its organizational systems, big or small. And the systems we use to organize either thinking or living, be they modular sizes for the manufacture of building materials or the models governing text layout, are all based on the assumption that placement is information.

— Reading Outside the Grid: Designers and Society

Punctuation, or the Dream of Legibility

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Butler

18 Finally,

19 after only three-quarters of a century of access to the simultaneity of electronically accessible information,
20 literacy is being redefined,
21 and has now moved even beyond vision
22 to include materials and other physical elements in its field.

This essay first appeared in *Ampersand*, (Vol. 6, No. 3) in 1986, (pp. 10 & 11). It appears here in a revised form. Reprinted by permission. Additional excerpts were gathered by the guest editor

Excerpts by Frances Butler taken from:
NEW DEMOTIC TYPOGRAPHY: THE SEARCH FOR NEW INDICES,
Visible Language, Vol. 29, No. 1, 1995
THE INTENDED PERCEPTION AND THE PERCEIVED INTENTION,
Coming of Age: The First Symposium on the History of Graphic Design, Rochester, NY: Rochester Institute of Technology, 1983
DANCE AND PLAY IN VISUAL DESIGN,
Society of Typographic Arts Journal, Vol. 2, No. 2, 1981
READING OUTSIDE THE GRID: DESIGNERS AND SOCIETY,
Society of Typographic Arts Statements, Vol. 4, No. 3, 1989
MODERN TYPOGRAPHY,
Design Book Review, Vol. 1, No. 3, 1984

END



Reading *Writing Space*

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Review by Anne Burdick

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WRITING SPACE:
THE COMPUTER, HYPERTEXT,
AND THE HISTORY OF WRITING
JAY DAVID BOLTER
LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS

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Arriving on the literary scene in the early '90s, Jay David Bolter's *Writing Space: The Computer, Hypertext, and the History of Writing* is one of those pro-hypertext books whose earnest boosterism leaves you feeling a little embarrassed. Nonetheless, Bolter's book has recently been seen changing hands around graphic design graduate programs – I once heard it referred to as "the only interesting writing about new media." While interesting isn't a word I would use to describe the writing, the book does touch upon a central area of interest to graphic designers: the impact of technology on the material embodiment of language (i.e. typography and graphic design). While Bolter's speculations on the future of electronic writing show their age, (the world wide web is conspicuously absent), his reconfiguration of the activity of writing in relation to its "spaces" – past and future – opens the way for an integrated study (and practice?) of writing and design that was previously unimaginable.

Writing Space has two basic premises: (1) writing is a technology for meaning-making via the structure and display of discrete signs – verbal and otherwise; and (2) the writing space, the materials and techniques used to write, determine what can be written and how it will be used and valued by a culture. Bolter examines the impact of the computer on writing, as a technology, object,

Reading *Writing Space*

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Burdick

idea, process, and metaphor. "Electronic writing will be felt across the whole economy and history of writing: this new technology is a thorough rewriting of the writing space." (p.40) Bolter looks at how the operational attributes of digital space – autonomy! fluidity! speed! – will change not only writing but our conceptions of literacy, human culture, knowledge and intelligence. He claims that the introduction of the electronic writing space constitutes a technological transformation more powerful than that of the printing press – he likens it to the impact of the phonetic alphabet. (pp. 42,50)

Bolter's argument is centered on the virtues of "electronic writing," a phrase he uses interchangeably with "hypertext," which basically means linked chunks of topical information – to the extent that he imagines it. The associative paths of the Internet are the hypertext ideal: a network that is infinite (sort of), incomplete, and constantly changing. There are no leftovers from the age of books, no closure nor privileged readings, with the computer, everyone's an author! A designer too! Reading becomes a kind of writing (and writing becomes a kind of designing), for the reader chooses her own path through a hypertextual world designed/written to be malleable, animated, and visually complex. "[T]rue electronic writing is not limited to verbal text: the writeable elements may be words, images, sounds, or even actions that the computer is directed to perform." (p.26) For the first time in history, writing technology allows the fluid integration of visual, aural and verbal elements, reconstituting the very definition of writing and – a notion Bolter overlooks – writers.

"The very idea of writing, of semiosis, cannot be separated from the materials and

1 techniques with which we write, and genres and styles of writing are as much determined by technology
2 as other factors." (p.239-240) Bolter explores how the physical characteristics of our recording devices,
3 from stone and wax tablets to papyrus rolls, the medieval codex and finally the printed book, have
4 "imposed" specific systems for the sequencing and "chunkitizing" (my word) of information. He presents
5 a history of operations that become increasingly complex, making them easier to use (where use = reading + access).
6 Self-contained volumes, encyclopedias, libraries, punctuation, even page numbers are revealed to be not
7 only facilitators for managing text, but technological components as well as philosophical constructs.
8 Writing's most sophisticated incarnation, the printed book, is the ultimate in standardization, linearity,
9 and univocality.

10 But the book is maxxed out, Bolter claims. While it may not disappear, it will no longer
11 be the cornerstone in the construction of human culture. The webbed paths, integrated media and linked
12 communications of hypertext will free us from its binds. Tear down the walls! Connectivity is the future!

13 Hypertextual connections emphasize the in-betweenness of movement and space. The
14 writer and the designer create meaning not by creating objects but by creating relationships. "Electronic

Reading place

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Burdick

15 writing is both a visual and verbal description. It is not the writing of a place, but rather a writing with
16 places..." (p.25) Bolter recognizes the computer as a "diagrammatic space" in which the visible and
17 experiential structures have a rhetorical dimension. As with maps or scientific charts, much of the
18 significant information is in the placement of elements relative to one another. Such visual syntax is
19 no longer beholden to spoken language; the information relayed through structure would be far too
20 cumbersome to verbalize. Additionally, relationships are not always static representations nor are they
21 always seen; many are travelled or encountered. The experiential aspect lies in the moment-to-moment
22 connections, where, as the saying goes, it's the journey that's important, not the destination.
23 By writing spaces, graphic designers and writers become tour guides, staging experience and enabling
24 connections.

25 While Bolter recognizes that visible structures exist in many printed forms, his
26 discussion of "graphic rhetoric" is limited to scientific or mathematical diagrams and charts, the visual
27 equivalent of dry toast. His preoccupation with the book has led him to overlook a rich array of popular
28 forms, perhaps because they are predominantly image-based. From comic books to fashion magazines,
29 Bolter had a plethora of sources with which to compare hypertext's integration of the visual and the
30 structural. But his lack of breadth limits his thinking, in spite of statements that show promise. "The free
31 combination of words, numbers, and images that is characteristic of the electronic writing space did not
32 begin with the computer; it has been a feature of the best graphics of the last two centuries." (p.78)

1 Bolter's lack of convincing examples is most damaging to his assessment of hypertext's
2 visual dimension. Using the history of pictographic writing as an entry point for his discussion of visual
3 communication, Bolter has somehow overlooked an entire century's discourse on art, photography, film,
4 media studies and design. His crude evaluation of the semiotic capacity of images is limited to those used
5 within conventionalized writing systems, such as Egyptian hieroglyphics or contemporary road signs. For
6 Bolter, an image and a sign are mutually exclusive – unless they are icons or, predictably, integrated via
7 hypertext. "In the electronic writing space, picture writing moves back toward the center of literacy."
8 (p.55) Apparently hypertext has allowed the English department to recuperate the image, but only as an
9 element of writing. So where does that leave the image-dominant "old" technologies such as film or
10 television? Is Bolter's proclamation the result of a technological shift or just a shift in perspective?

11 Either way, Bolter gets points for trying: he pulls together elements overlooked by
12 most literature professors when writing to an audience of authors. But he's only got half the picture. In
13 this way, *Writing Space* highlights the shortcomings of the industrial era's division of labor. The old
14 disciplinary boundaries improperly limit writers' and designers' (and filmmakers'! and architects'! and

Reading Writing Space

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Burdick

15 computer scientists'! et al's!) abilities to negotiate the visual/verbal flux of the electronic writing space
16 (or for that matter, of any writing space). By incorporating structures, paths, and images into notions
17 of writing, Bolter has "discovered" what graphic designers have known all along – the material form is a
18 part of the message!

19 Surprisingly – or not – Bolter uses his newfound knowledge to retain the centrality of
20 his position as a writer/author. "[The computer] now offers writers the opportunity both to create their
21 own character fonts and to deploy pictorial elements in new ways." (p.63) But Bolter claims typography
22 only to discard it later. His "visual history" of writing – a history that is "no longer appropriate to
23 dismiss" (p.63) – is basically a cursory review of typographic technologies through the ages, from
24 calligraphy to Linotype. In his view, typography's prevailing values – transparency and uniformity – have
25 not changed fundamentally since the Enlightenment, when the permanence of print fostered the impulse
26 to create the perfect page.

27 But in the perpetual motion of the electronic writing space, he claims, it barely mat-
28 ters what type looks like! Not only is it bitmapped and coarse, it's on screen for just a matter of seconds.
29 "Work on computer typography directs our energies away from appreciating the electronic space in its
30 own right – a space in which the subtleties of type size and style may no longer be important to the
31 writer's or the reader's vision of the text." (p.67-68) But don't type size and style constitute anyone's
32 "vision" of the text? By reducing typographic issues into typographic principles that only apply to the



1 printed page, Bolter retains his status as master of the new realm but mistakenly erases a key element
2 of the visual communication he champions.

3 "The computer encourages the democratic feeling among its users that they can serve
4 as their own designers. (...) This new technology thus merges the role of writer and typographer that had
5 been separate from the outset of the age of print." (p.66) The ramifications of this significant change
6 have yet to play out in a sophisticated or compelling manner, due to the very prejudices and boundaries
7 leftover from print and exemplified by Bolter, (in spite of what he thinks). If writing is to move beyond
8 the strictly verbal, it's worth asking who the new writers are going to be. Is Bolter expanding the domain
9 of traditional writers or is he opening the way for surprising new hybrids and inclusive collaborations?

10 Apparently, the former, as evidenced by the accompanying hypertext of *Writing Space*
11 that is available on disk. Created in a program called Storyspace™ that Bolter co-wrote with Michael Joyce
12 and John B. Smith, the hypertext version contains digressions and elaborations too unruly to be contained
13 in the book, which is perhaps the disk's most interesting attribute. I spent about two hours clicking my
14 way through its tunnel of page screens, one at a time. I felt trapped in an anemic textual void. The

Reading Writing Space

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Burdick

15 screen, a surprisingly static white rectangle, contained paragraph-length chunks of text peppered with
16 hyperlinks and icons for forward and back, giving the whole experience a mundane sameness. The jumps
17 between chunks just weren't enough, regardless of how many choices I was given. Taking into account
18 that it was created five or six years ago – and that it fit on one tiny disk – I didn't exactly expect an
19 action flick. Nonetheless, the semantic capacity of the structure was severely limited; had there been
20 visible juxtapositions such as, say, five page screens open at once, the hypertext would have kept its
21 vow to move "beyond" the possibilities of the book. For a fluid medium that promises the future,
22 Bolter's use of it was a big disappointment.

23 Perhaps, then, *Writing Space's* most significant contribution is its title. To conceive
24 of the objects that we design as spaces for writing – or better yet, as spaces that are written, written
25 in, and written to – reveals the ineluctable connection between our actions as designers and com-
26 munication's outcome. "The organization of writing, the style of writing, the expectations of the reader
27 – all these are affected by the physical space the text occupies." (p.85)

28 The transparency of print's established structures have fostered the illusion that
29 communication consists of words alone. We have become so used to writing to the page that we seldom
30 realize how extremely rigid and specific its characteristics are. On the other hand, when writing and
31 designing in electronic space, it becomes impossible to overlook the impact and attributes of the spaces
32 we actively create, due primarily to the absence of conventions. Structuring this seemingly fluid and

1 dynamic environment, shaping it and setting limits, can feel like a bold and violent act. By writing
2 spaces, designers are in effect "writing" content, not by choosing the words themselves, but by setting
3 the parameters by which the words will be chosen, choreographing relationships between visual, verbal,
4 and aural elements, and staging the reader's experience through pacing and range of movement.

5 If anything, Bolter's book reinforces the fact that in any writing space, writing and
6 design cannot be neatly separated out, and that in the electronic writing space in particular, they must,
7 by necessity, work in tandem. Now more than ever we need an integrated study of the history and
8 future of visible language.

9 Unfortunately, Bolter's isn't it.



Reading Writing Space

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Burdick

Anne Burdick operates The Offices of Anne Burdick in Los Angeles, where she practices and writes about graphic design. She is also an instructor at Ca Arts.



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The Readers Respond

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Mail

VENT
RESPOND
COMMENT OR
CRITICIZE

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Snail Mail: 4475 D Street, Sacramento, CA 95819, USA
Fax: 916.451.4351 / Email: editor@emigre.com

Dear Emigre,

My final college year, my thesis project, the real world, job-hunting, student loans, rent, food, clothing, shelter...YIKES!

It all begins right about now, the last month before the first semester of your final year in college. The anxiety sets in, you begin to second guess yourself and all of the skills that you have gained in the last four to six years of college. You want to be part of the next big thing but it sounds like some rock band that gets played on the so-called alternative station... however, the band was only alternative before it was played on that station! So then you don't want to be the next big thing because the idea of it scares you... you don't want to be a "has been" or a "tried to be" who gets fifteen minutes of fame and then is criticized for fifteen years. The pressure is enormous.

a book or magazine that could be read in bed as you are falling asleep.

The emptiness drove me to strive for knowledge and wisdom, found in bound text. The public library had a new meaning of experience. The whole process of searching for a book became pleasurable.

I learned the rules of design and began to question them. I broke the rules and learned how to express my concerns through design. My confidence began to soar. But then I looked back and forward and back again and realized that becoming a designer was a huge responsibility. In order to survive financially, I would have to produce work that may not have much conceptual or cultural depth. Yet to survive intellectually, I would need to be able to create work that involved research, discovery, controversy, and growth. There is no reassurance... there is only hope, hard work, and the quest for knowledge...

YIKES!

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Mail

So you work at your internship for the summer realizing that the market is not asking for "cool" or "hip" design but rather design that is "practical" and "visible." Ahhh... you relax a bit, realizing that you are capable, but maybe just a little bored. And the fear of boredom sets in. *Do I really want to work for someone else, from nine until six, Monday through Friday plus overtime, to produce practical design? Is the title "graphic designer" synonymous with "graphic artist" or "desktop publisher"? Finally you ask, is design for me or am I suited for design?* The issue of technology becomes a factor. At first I was fascinated and addicted to the technology. The daughter of an electrical engineer and a business woman, I was always exposed to the fast and ever-changing world of computers. I caught on quickly and used the medium as a tool. Slowly, my interest declined after too many evenings in front of a noisy hard drive and a blank screen. But then the World Wide Web came along. I could access information and connect to other people all over the world. Yet, I slowly withdrew from this form of information. There was not the same tangible quality of

the knowledge that could help me understand what the next big thing could be.

Now I try to withstand my anxiety of being or seeing the next big thing. I selectively look and listen to the media. I lean towards reading history and fiction, searching for clues. I take road trips away from the city to see what the concerns of the ordinary human are. I listen to music of the past and try to decipher its relationship to the music of the present and the future. I have stopped talking and started listening, looking, and absorbing as much as I possibly can. It is amazing how much you learn from observation.

The next big thing is not a look or a sound. It is not a style or a speed. It may not be graphic design or the World Wide Web (though the next big thing will undoubtedly depend on them). It could be a level of understanding, of sharing, and of making useful and meaningful connections for everyone to appreciate and benefit from. Or it could be the second coming of Christ, and what a design job that would be! One thing is for sure... it won't be as frightening or intimidating if you are a part of it. And



for all of you established designers who are concerned about the future of graphic design, so are we... the class of 1997, official design team of the next big thing.

Keara Fallon, senior student at CCAC,
San Francisco, California

Dear Emigre,

I wanted to note how much I enjoyed your Next Big Thing issue [Emigre 39] and to respond more particularly to one point buried in your title essay. You mention that the most interesting recent development might be, in addition to the changes in how graphic design is produced, the changes in who produces it. But I wonder: has much really changed? There seems to be an unexamined assumption that the change in technology has liberated groups previously excluded from graphic design. (You

all humans.''" How can something be both non-syntactic and extremely sophisticated?

Kevin Fenton, Internet

Response,

You bring up a good point. Has anything really changed within design? When Laurie Haycock Makela suggested that now anyone can do design (in an interview with various Cranbrook students and teachers published in Emigre 19), I assumed the following: In the mid-eighties, after the Macintosh computer had been introduced, I would spend hours at a service bureau in downtown Berkeley to print out my digital layouts. The Macintosh, at that time, cost \$900 and the only software available was included with the purchase. For those who couldn't afford the Mac, rentals were available by the hour at very reasonable

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M a i l

Revolution?

began to examine this in an earlier essay when you pointed out that David Carson and his collaborators were not exactly the staff of *Sniffin' Glue*.) But has anything changed? Is the average designer poorer? More likely to be female? More likely to be ethnic? Do the design annuals really include more work by the disenfranchised and, if so, does the new technology explain this? Or is any change just a result of *de facto* or *de jure* affirmative action? Design software, and the hardware to run it, and the education that usually serves as an introduction to the field, costs tens of thousands of dollars. My hunch is that, for all the talk of a revolution, the revolution has consisted of some new boys getting some new toys. That is not necessarily a bad thing – the American revolution could be described in similar terms – but, in the interests of accuracy, it would be interesting to determine what has really happened. I don't have the energy to provide the answer, but I thought that I would raise the question.

One point about the Frances Butler quote: "the 'fluid, additive, non-syntactic, and, above all, extremely sophisticated thought process that are [sic] the natural birthright of

rates. At this service bureau I would encounter people from all walks of life, gender and race sitting behind 128k Macintosh computers doing what looked a lot like graphic design: laying out resumes, making flyers to advertise the sale of a bed, or to announce a musical recital, creating a simple report for a small corporation, or in my case, the pages of early Emigre. While it is debatable whether this can be called graphic design, it is undeniable that each of these people was empowered by the technology to create their own print work – and these are the people I assumed Laurie was referring to. The work of these "disenfranchised" designers will surely not show up in the design annuals. And you're right, we're not seeing these "minorities" participate in the more glamorous, better paid, influential and high profile areas of graphic design. We don't see them work for Nike, or heading large advertising agencies creating campaigns to sell Coca Cola or Levis. And neither do they earn annual salaries of \$75,000 and upwards. But we need to ask what defines graphic design. Personally, while I understand the lure of design awards and the convenience of

a large salary, I do not consider selling my soul to a multinational corporation as particularly liberating. To determine if anything has really changed within the world of graphic design, I suggest one look beyond the *status quo*, and include the academies and universities, art and social organizations and other non profit-oriented programs, and the many small design studios mushrooming all over the globe. I'm sure a very different picture of the make-up of graphic designers will emerge, and a personal computer will sit on every desktop. I'm fairly certain that it was new technology that inspired and helped Zuzana Licko, in a world dominated by white males, to start her own typefoundry. You might not run into Zuzana at every single type conference, nor was she ever invited by Nike to design ads, but that doesn't mean she isn't doing quite well. In the interest of accuracy, we might even

Dear Emigre,

The latest issue of *Emigre* was beautiful. I thought your grappling [GRAPHIC DESIGN AND THE NEXT BIG THING] with theory-versus-practice and naming names was brave (and critical) – as expected in a journal of critical writing. Also strong was Lorraine Wild's essay [THAT WAS THEN, AND THIS IS NOW: BUT WHAT IS NEXT?] addressing the knowledge gaps in design education. Mostly, though, I enjoyed seeing a design publication take a serious look at Sven Birkerts's *The Gutenberg Elegies*. Diane Gramala's review [BEFORE YOU BURY GUTENBERG...] was intelligent and thoughtful. However, I found Birkerts own grappling with the new (media) world and technology to be more open-minded and inquiring than her reduction of his argument to his own polemic – "refuse it." Yes, he is someone who likes to sit in an armchair with a cup of coffee and

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Mail

Você não está.

devote a future issue of *Emigre* to this topic. Thanks for raising the question.
Rudy VanderLans, Berkeley, California

Dear Emigre,

I've just read *Emigre*'s latest issue "Graphic design and the Next Big Thing." It was actually the first issue I had the chance to have in my hands – it's not easy to find them here in Rio de Janeiro, but we can see its pages in almost every design annual or computer-design publication.

It is a valuable object.

However, I was very disappointed to read it. I didn't read all of it, but what I read (PREFACE, THAT WAS NOW..., THE ANGEL IS MY FLOATING POINT...) didn't make me want to read the rest. You are telling nothing! Você não está dizendo nada.

The reader is, at every moment, presented with what someone said in some AIGA meeting or something, but is not, at any time, presented with new ideas. Are there any new ideas?

Joana Ventura, Internet

stare off into space with a book in his lap. Deeply probing this experience leads to a compelling argument that reading and knowledge are not just about eyes following words on a page; it's about the thinking that happens between the eye and the text; it's about the space between reader and page; and it's about what happens when you look up from the page, carrying the last words with you as your mind wanders to its own connections. Such qualitative experiences still do not quite happen online, neither as a physical experience nor as a way of thinking and learning. His argument may be posed in a polemical fashion, but it is a substantive challenge to technology and media: let us not just throw millions of bits into space that are only connected in a fleeting manner with people and knowledge. Such discussions about reading and the future of the book, it seems to me, are important in that they define many of the qualities of life we should ask of our technology and of our future.

Birkerts, by the way, has not "refused it"; rather, he has edited a new collection of essays on these topics titled, *Tolstoy's Dictaphone: Technology and the Muse*. *

William Drenttel, Drenttel@aol.com, New York City

*
St. Paul, MN
Graywolf Press
1996



Dear Emigre,

[In response to the upside down "open quotes" issue addressed in the letters section of *Emigre* 39.] Although it would probably be safe to assume that, like most modern typographic characters, open quotes have some historical link to manuscript bookhands of the Middle Ages or Renaissance, I thought it would be wise to probe. From what I've been able to gather by posing your question to a few authorities, an ancient form of quotation marks, a pair of upright bars called a "paragraphos," originated in Greek texts during the 9th Century, when Carolingian minuscules, ancestors of today's lower case roman letters, also began to appear in Latin manuscripts. As for the evolution of the pair of raised, inverted commas used to open a quotation, it seems appropriate to mention the similarity between the structure of a

worldwide seem to favor "upside-down" double and single open quotes – and perhaps have ever since such marks became standard in English 200 to 300 years ago – convenience and convention have probably been the biggest reasons. From an aesthetic standpoint, I find open quotes made from flopped commas just as acceptable as open quotes made from rotated commas. One typeface I designed, called Roxy, is based on American sign painting models and follows the sign painting norm of using top-heavy open quotes. I've always used such marks in my sign painting because I think they look better. If the English reading world could have its say, and not be bound to tradition the way designers of type and lettering often are, I suppose both styles would be popular.

John Downer, from Sheffield, England



M a i l

dizendo nada.

calligraphic comma formed with a quill and the structure of the comma in the majority of text faces used today. Perhaps most crucial to understanding how the weight stress and orientation of modern typographic punctuation serves to maintain the status quo for readers of Latin-based languages is an examination of the same marks when they were written by a scribe using a broad edge writing tool. The comma is a mark which, when written as a clockwise curve with a quill, ordinarily appears top-heavy and bows to the right. Trying to form the mirror image of a comma with the same quill held at the same writing angle, by (conversely) following a counter-clockwise curve, yields not the mirror image of a comma, but rather an upside-down & backwards comma! In early printing, typefounders undoubtedly found it more expedient to use the punch that had been cut for the comma to strike matrices for "comma style" open quotes as well, thus preserving the look of formal writing styles without making special punches to obtain opposite curvature. I would add that while traditional typographers

Dear Emigre,

I just thought I would write you guys to ask a simple question. When is the magazine coming? Never has anything been more eagerly awaited than *Emigre* magazine no. 39. Day after day I work in my studio wondering if it will come today. The answer by nightfall is always no. This will be my first issue that will be delivered to my doorstep and I couldn't be more excited about it. Not since I mailed away for some Star Wars action figures in the late seventies and early eighties have I waited for something to come in the mail with so much anticipation. Sometimes I wonder if you just forgot to send it to me. Anyway please let me know, when is it coming? Thanks, I love you guys.
George Vergette, Internet

Dear Emigre,

Just received the new issue and while I have not begun to read it, I have a few comments on the recent mailing and more precisely, the issues since the new design.



The Current Issue:

1. Size is not important. Though I miss the grandeur of reading *Emigre* I actually welcomed the small size from a practical consideration. The day I received "No Small Issue" No. 33, I was on my way to the airport for a homeward-bound flight. Just imagine, sitting in the belly of a DC-9 with *Emigre* neatly spread on my tray table and the guy next to me asks, "what you readin'?" If it had really been no small issue, his question might have been, "would you mind curbing your magazine, or what ever it is?" Heck, I might have been thwarted by an unpleasant yet graciously condescending attendant with, "Sir, I'm sorry but that will not fit in the overhead."

2. It never fit in a damn mailbox either! Pre-No.33 issues were so welcome with their corrugated boxes that protected them during their journey, and postal carriers knew that

(was) different. It helped me see what was happening outside Corporate American design in educational and professional circles.

This is my wish list for *Emigre*:

1. Protect my magazine. *Emigre* is my only subscription not only for content but, for lack of a better word, its "look." I suppose that's why *Emigre* is in the collections of major museums. Plus, I see the issues I have as precious artifacts, read them carefully and put them back in their envelopes for storage. A simple DO NOT BEND or a slice of cardboard in the envelope would be a welcome addition.

2. I can't and don't want to even suggest that you publish what I want. I only ask you to take a look at the descriptions of past issues in your catalogs and on your web site. There is a definite swing from "this is the great profession we are in" to "this is the great depression I am in." Many essays have been thoughtful and intriguing, but the

Wish list

7 6

Mail

stuffing it into a brick sized mailbox was off limits when it reached its final destination. Now, its smaller format (and not even a DO NOT BEND request on its weak-kneed envelope) makes it a vulnerable target to damage. This was evidenced with the receipt of No.37 and the most recent No.39 with the absence of even a substantial stock used for the cover. The other issues arrived with minimal damage except for No.35. It was jammed in the box so that to get it out I had to fold it. The envelope was ripped from the flap around to the front and the magazine was bent in many places. Graciously you sent me a new one - still a little damaged.

3. I understand that things evolve and I welcome change. What I want to know is what ever happened to the coverage and exploration of graphic design education from around the world, the words and images of emerging designers, *Emigre Music*? I know these items haven't completely disappeared, but my impression of *Emigre* is that the journal of discourse and ideas is becoming a monograph of design like *Design Issues* or the ACD's *Statements*, both respectable publications. I like(d) *Emigre* because it is

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constant overtures on how this individual thinks what graphic design has been and what that individual thinks graphic design is make me miss the days of "this is where I'm taking graphic design."

Thanks for your continued work.

Brady Bone, Charlotte, North Carolina

Dear *Emigre*,

I am not a subscriber or even a regular reader. However, I am passionate about the dynamic institution that I feel is *Emigre*. I am sick of people telling you how and what to publish. *Emigre* was a beautiful and overwhelmingly interesting publication long before people felt the urge to command style, format and content changes to suit their personal preferences.

Interesting and thoughtful design should never be treated to a taste test. It is disheartening enough when ignorant clients feel the need to molest a page or an idea with personal whim (yes I know they're paying). But when so-called design professionals succumb and become bad



examples for students, they start to make the "cocktail set" critics look intelligent and well-intentioned.

Any editor/publisher will tell you that quality feedback is critical in any publication – particularly with so few staff involved so intensely. *Emigre* already covers such a wide spectrum of so much juicy eye and head candy – you even have guest editors and designers to spice things up.

Why is everyone complaining about what is happening to "their" magazine? Don't they have the skills to publish their own? I know a used-car salesman with a better zine than most professional *RayGun* wannabes.

If you don't like it, do it yourself, or don't read it. Thanks for the perseverance and do what feels right for you,

Simon Flynn, Berlin, Germany

to communicate content not only visually, but textually, as well.

That's it for the big picture.

Now that *Emigre* seems to focus more on text and the act of reading, the quality of the featured articles and the points they try to make is becoming quite crucial. I thought that the Lorraine Wild lecture/essay in no. 39 especially was the direct opposite of a good article. Of course, the writer/lecturer is a highly qualified person, one of the many highly qualified postgraduate cultural thinkers around, but it remained totally unclear what she meant with her vague collection of personal experiences and quotes. The whole piece relied on being well informed, using historical reflection and the repetitious clichés about new media, but was in fact, uninspired. This kind of reflection for reflection's sake does not add any freshness to the "profession I desperately care about."



M a i l

Curveballs

Dear *Emigre*,

I have been reading *Emigre* regularly and I find it a magazine that is powerful not only because of the individual quality of each issue, but primarily because of the overall formula. I think, however, that although it started as a magazine on graphic design, the importance of a magazine like *Emigre* is – or should be – recognized within many different disciplines. I think you should be proud of having reached the moment in which *Emigre* has become a place for documentation of visual innovation by others, as well as a visual innovator itself, which I believe leaves behind certain traditional positions, including most art and design mags. Even more important is that this interaction between *Emigre* itself and the projects and people it represents adds meaning.

Therefore, I don't share the criticism of your infamous "shift in editorial policy." To me, this shift was welcome simply because it further explored new possibilities. There must have been lots of people who were simply starting to regard *Emigre* as a nice series of poster books. I can understand your decision

It fails to inspire, it does not take any risks, and the subjects it discusses always use the editorial "we." So she gives the impression of speaking on behalf of what "is," not what "she thinks." The truth is that she is only speaking for herself. Also, I had the feeling when reading the article that I was reading jargon. Today, each art discipline has its own kind of jargon, and Lorraine Wild has definitely contributed her part to that of design!

Daniel van der Velden, Jan van Eyck Akademie,
Maastricht, The Netherlands

Dear *Emigre*,

I was writing to compliment the design of issue #39. Simply, the focus was on the brilliant writing (not an overdesigned extravaganza) and the interesting voices that expressed wonderment/concern about the plunge into the amorphous soup of design/media/technology/life (if I were typing it in URLs the slashes could extend into infinity). While I embraced the clean design, I want you to know that my second favorite issue was #29; the dazzling *Designers Republic* issue! So keep throwing me curveballs. Thank you.

Ward Andrews, University of Arizona

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Emigre no. 39

Graphic Design and the Next Big Thing

Read it to believe it. As we are standing on the brink of yet another significant shift in how we will communicate and process information, this issue of *Emigre* zooms in on the heated discussions that have become the most interesting part of the hype surrounding electronic publishing and its facilitator the Internet. Lorraine Wild gives us an overview of graphic design education in the United States and the way it is currently being challenged by new media. She raises the question: whether our current understanding of graphic design helps or hinders us in preparing for the onslaught of one of the most sweeping changes in communication yet. Her article was originally presented as a lecture at the conference *101: The Future of Design in the Context of Computer-Based Media* held at the Jan van Eyck Academy in Holland in late 1995. Kenneth FitzGerald, in a review of Elliott Earls's enhanced CD *Throwing Apples at the Sun*, gives rise to the Presumptive Designer. His review spotlights the possibilities for designers to "clear a wider space for their activity." Patch Tu finds herself on a train with two well-known New York designers discussing geeks, freaks, cyborgs, blenders, power tools, remote controls, and other nervous machines, and how it all relates to graphic design. Carl Francis Disalvo reviews Avital Ronell's *The Telephone Book*. Published in 1989, *The Telephone Book* utilized novel text formatting structures, creating an object of discourse that would create a new standard for reading. Paul Roberts lends us his insights as writers bemoan loss of authorial control in the "late age of print." In the essay "Alien Travels," Diane Gromala reviews Sven Birkerts's book *The Gutenberg Elegies*, a book that ponders the "Fate of Reading in an Electronic Age," while multimedia artist David Thomas (of *Pere Ubu* fame), in his essay "It Bytes" boldly suggests that "Multimedia will never go anywhere until the amateurs take over..."

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Statement of Ownership, Management, and Circulation

1. Publication title: **Emigre** | 2. Publication No.: **ISSN 1045-3717** | 3. Filing date: **9/25/96** | 4. Issue Frequency: **Quarterly** | 5. No. of issues published annually: **4** | 6. Annual subscription price: **\$28.00** | 7. Complete mailing address of known office of publication (Not printer): **4475 D Street, Sacramento, CA 95819, USA** | 8. Complete mailing address of headquarters of general business office of publisher (Not printer): **4475 D Street, Sacramento, CA 95819, USA** | 9. Full name and complete mailing address of Publisher: **Emigre, Inc., 4475 D Street, Sacramento, CA 95819, USA** | 9a. Full name and complete mailing address of Editor and Managing Editor: **Rudy VanderLans, 4475 D Street, Sacramento, CA 95819, USA** | 10. Owner: **Emigre, Inc., 4475 D Street, Sacramento, CA 95819, USA; Rudy VanderLans, 4475 D Street, Sacramento, CA 95819, USA; Zuzana Licko, 4475 D Street, Sacramento, CA 95819, USA** | 11. Known bondholders, mortgages, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: **None** | 12. **Not applicable** | 13. Publication name: **Emigre** | 14. Issue date for circulation data below: **Fall 1996** | 15. **Extent and nature of circulation** | a. Total no. copies (Net press run). Average no. copies each issue during preceding 12 months: **7,000** | Actual no. copies of single issue published nearest to filing date: **7,000** | b. Paid and/or requested circulation (1) Sales through dealers and carriers, street vendors, and counter sales (Not mailed). Average: **2527** Actual: **2177** (2) Paid or requested mail subscriptions (Include advertisers' proof copies/exchange copies). Average: **1749** Actual: **1655** | c. Total paid and/or requested circulation (Sum of 15b(1) and 15b(2)). Average: **4271** Actual: **3832** | d. Free distribution by mail (Samples, complimentary, and other free). Average: **20** Actual: **24** | e. Free distribution outside the mail (Carriers or other means). Average: **18** Actual: **10** | f. Total free distribution (Sum of 15d and 15e). Average: **38** Actual: **34** | g. Total distribution (Sum of 15c and 15f). Average: **4309** Actual: **3866** | h. Copies not distributed (1) Office use, leftovers, spoiled. Average: **2691** Actual: **3134** (2) Return from news agents. Average: **0** Actual: **0** | i. Total (Sum of 15g, 15h(1), and 15h(2)). Average: **7000** Actual: **7000** | Percent paid and/or requested circulation (15c/15g x 100). Average: **99.11** Actual: **99** | 16. This statement of ownership will be printed in the 40th issue of this publication. | 17. Signature and title of Editor, Publisher, Business Manager, or Owner: **Rudy VanderLans**

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**The bus was passing by a sign advertising
the promise of cable TV. There was some
old guy rummaging through the garbage.
This was my stop.**

— Bill Viola



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